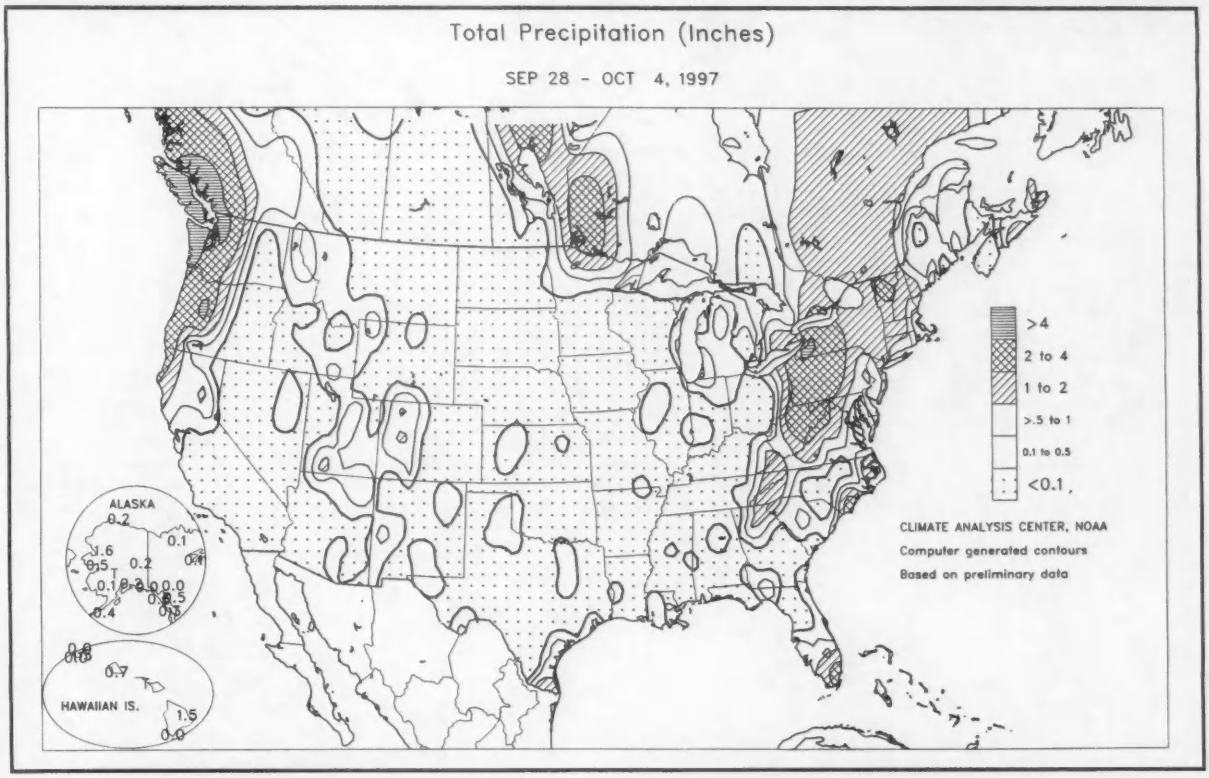
Volume 84, No. 40 October 7, 1997

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board



HIGHLIGHTS

September 28 - October 4, 1997

Dry, very warm weather (weekly temperatures 6 to 12°F above normal) prevailed on the **Plains**, promoting winter wheat planting and growth, but reducing topsoil moisture. Across the **Western and Central States**, more than 70 daily-record highs and a dozen monthly records were set during the week. Meanwhile, rainfall preceded a shot of cool air in the **East**. Much of the **Northeast** received frost or a freeze on Thursday morning, resulting in a dozen daily-record lows. High winds accompanied the surge of cool air across the **Midwestern, Great Lakes, and Northeastern States**. Farther west, stormy, cooler weather overspread the **Pacific Northwest**.

(Continued on page 3)

Contents

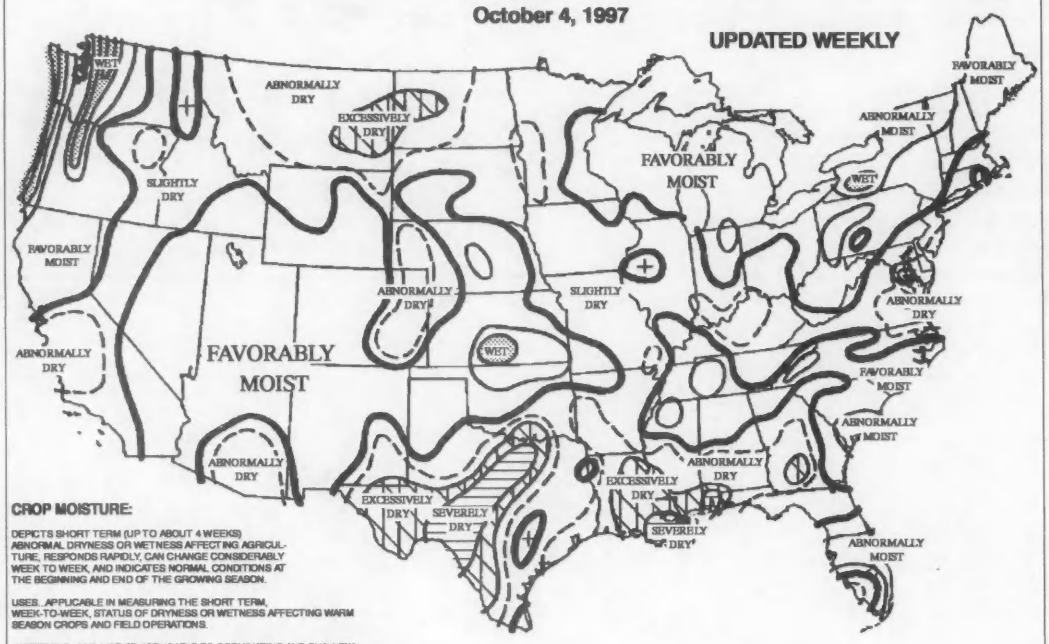
Crop Moisture Maps 2
Extreme Maximum & Minimum Temperature Maps 3
Temperature Departure & Pan Evaporation Maps . 4
Growing Degree Day Maps 5
National Weather Data for Selected Cities 6
September Weather Summary 9
September Precipitation & Temperature Maps 10
September Weather Data for Selected Cities .. 11
National Agricultural Summary 12
Crop Progress and Condition Tables 13
Pasture Condition Table 15
State Agricultural Summaries 16
International Weather and Crop Summary & **September Temperature/Precipitation Table** . 22
Two Major El Niños Compared: 1982 vs. 1997 . 27
Subscription Information 28

CROP MOISTURE

(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)

October 4, 1997

UPDATED WEEKLY



CROP MOISTURE:

DEPICTS SHORT TERM (UP TO ABOUT 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK, AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.

USES...APPLICABLE IN MEASURING THE SHORT TERM, WEEK-TO-WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS.

LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55 DEG F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

CROP MOISTURE INDEX

(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)

October 4, 1997

(Index values are in tenths; example: 37 = 3.7)

SHADED AREAS:
INDEX INCREASED OR DID NOT CHANGE

ABOVE 3	EXCESSIVELY WET; SOME FIELDS FLOODED
2 TO 3	TOO WET; SOME STANDING WATER
1 TO 2	SOME FIELDS TOO WET; PROSPECTS ABOVE NORMAL
0 TO 1	MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
0 TO -1	PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2	SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
-2 TO -3	DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY
-3 TO -4	SEVERE DRYNESS CONTINUES; MORE RAIN URGENTLY NEEDED
BELOW -4	NOT ENOUGH RAIN; STILL EXTREMELY DRY

UNSHADED AREAS:
INDEX DECREASED

ABOVE 3	SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3	MORE DRY WEATHER NEEDED; WORK DELAYED
1 TO 2	FAVORABLE EXCEPT STILL TOO WET IN SPOTS
0 TO 1	FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1	TOPSOIL MOISTURE SHORT; GERMINATION SLOW
-1 TO -2	ABNORMALLY DRY; PROSPECTS DETERIORATING
-2 TO -3	EXCESSIVELY DRY; YIELD PROSPECTS REDUCED
-3 TO -4	POTENTIAL YIELDS SEVERELY CUT BY DRYNESS
BELOW -4	EXTREMELY DRY; MOST CROPS RUINED

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

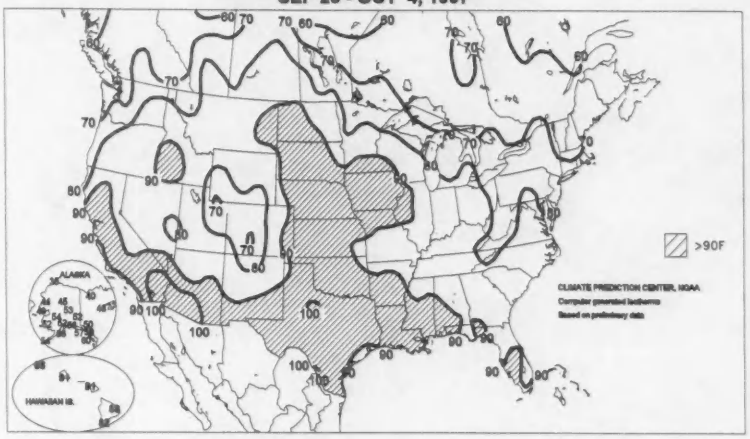
(Continued from front cover)

Early in the week, a very strong low-pressure system crossed **eastern Canada**. On Tuesday, the storm's central pressure dropped to at least 28.76 inches (974 millibars). A day earlier, September barometric-pressure records were set in **Milwaukee, WI** (29.30 inches, or 992 millibars) and **Binghamton, NY** (29.26 inches, or 991 millibars). By October 1, **Binghamton** reported its first wet snowflakes of the season. Farther west, wind gusts on Monday were clocked to 56 mph in **Peru, IL**, 54 mph in **Kenosha, WI**, 51 mph in **Ottumwa, IA**, and 49 mph in **Rochester, MN**.

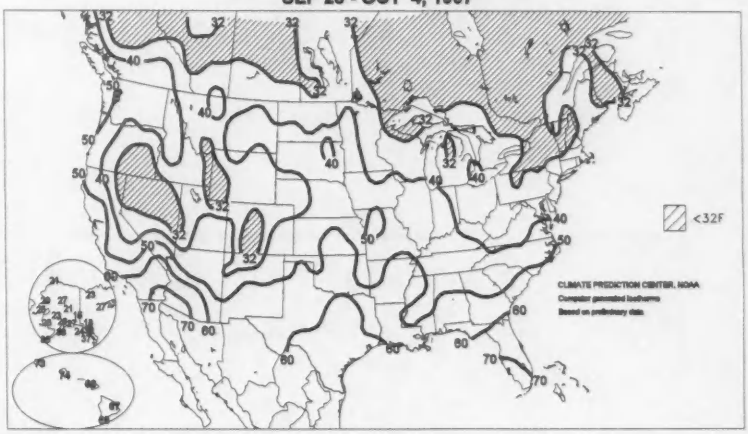
Warmth spread eastward during the week in response to an area of intensifying storminess over the **eastern Pacific Ocean**. On Sunday, **Lompoc, CA** (100°F) notched a daily-record high. A day later, **Walla Walla, WA** recorded 89°F. October-record warmth first appeared in **Boise, ID** (94°F) on Wednesday, spreading into the **Plains** and **Midwest** on October 2-3. On Thursday, monthly record highs soared to 98°F in **Pierre, SD** and 97°F in **McCook, NE**. October records on Friday included 95°F in **Mason City, IA** and 93°F in **Rochester, MN**. **Rochester's** maximum was its highest since June 29, 1996, and well above the year's previous highest temperature of 88°F.

In contrast, daily-record lows on Thursday included 30°F in **Scranton, PA**, 32°F in **Atlantic City, NJ**, and 32°F at **Virginia's Dulles Airport**. Although not a record, **Lansing, MI** logged 30°F. Before the chill arrived, early-week rainfall totaled 1 to 3 inches along the **Appalachian cordillera**, with localized amounts in excess of 4 inches from **West Virginia** to **western New York**. Along the **West Coast**, heavy rainfall and high winds arrived on Wednesday. In **Oregon**, **Florence** collected a daily-record rainfall (1.74 inches), while **Cape Blanco** clocked a wind gust to 76 mph. **Florence's** winds gusted to 60 mph on October 1, and 63 mph a day later. Another wave of rain arrived on Saturday, resulting in a daily-record rainfall (1.01 inches) in **Salem, OR**. At week's end, a batch of tropical moisture moved northward into **southern Texas**, sparking beneficial rainfall.

Extreme Maximum Temperature (°F)
SEP 28 - OCT 4, 1997



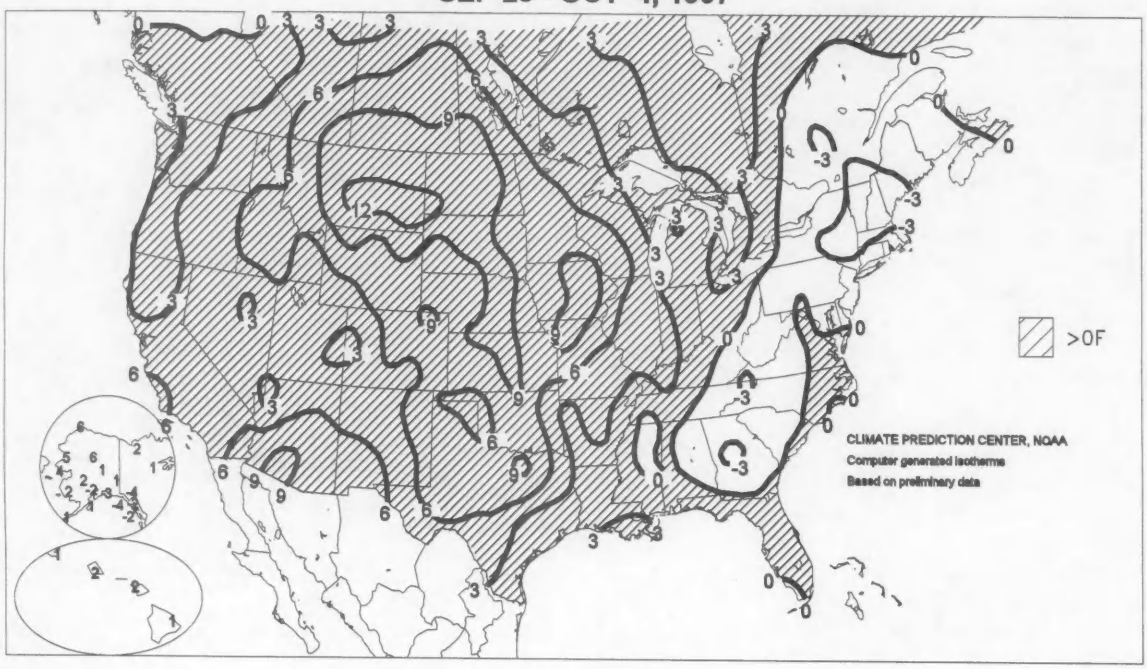
Extreme Minimum Temperature (°F)
SEP 28 - OCT 4, 1997



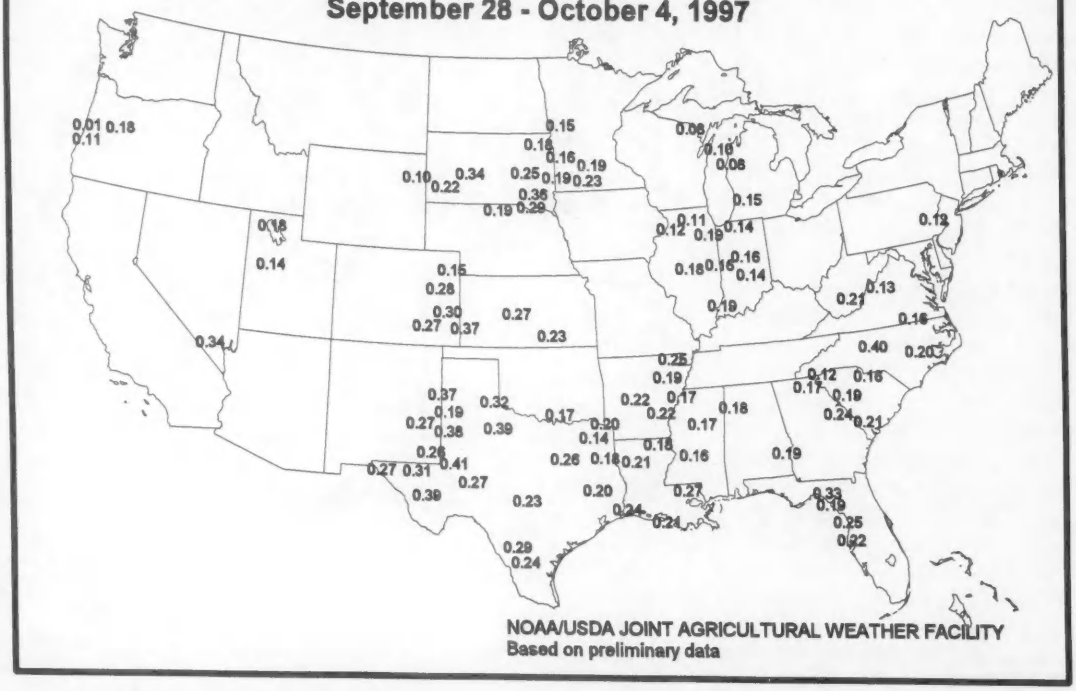
Monthly Record Warmth, October 1-3, 1997

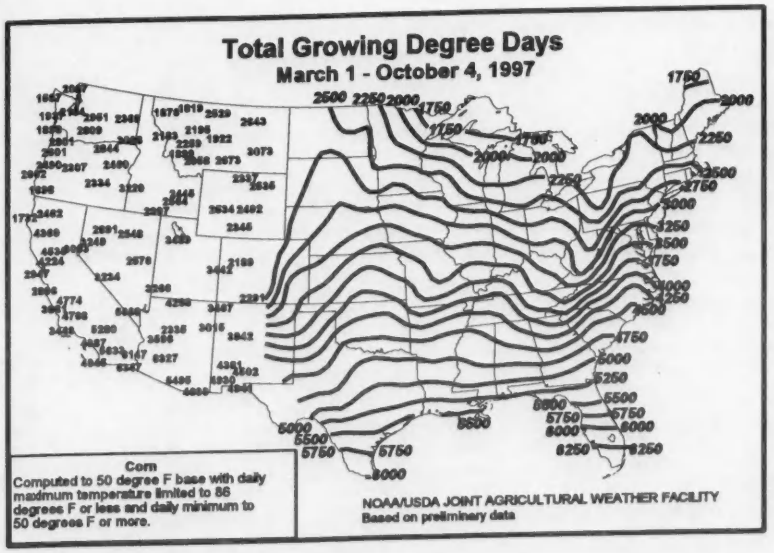
Location	Temp. (°F)/Date	Former Record (°F)/Date
Boise, ID	94 on October 1	94 on October 1, 1992
Pierre, SD	98 on October 2	98 on October 6, 1993 and October 1, 1892
McCook, NE	97 on October 2	97 on October 3, 1967
Hill City, KS	97 on October 2	96 on October 3, 1954
Miles City, MT	94 on October 2	93 on October 4, 1963 and October 1, 1953
Waterloo, IA	95 on October 3	95 on October 6, 1963 and October 12, 1930
Mason City, IA	95 on October 3	95 on October 5, 1963
Cedar Rapids, IA	94 on October 3	92 on October 6, 1963
Moline, IL	93 on October 3	92 on October 6, 1963
Rochester, MN	93 on October 3	90 on October 2, 1953
Minneapolis, MN	90 on October 3	90 on October 10, 1928
Dubuque, IA	90 on October 3	89 on October 4, 1897

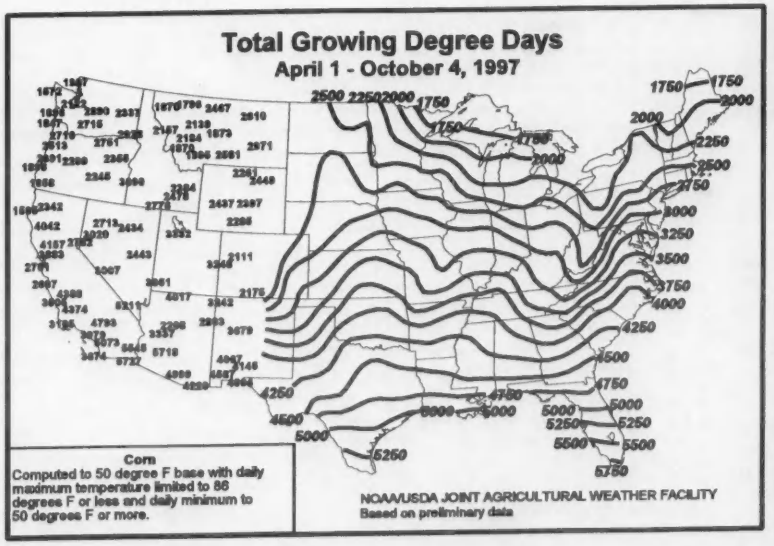
Departure of Average Temperature from Normal (°F)
SEP 28 - OCT 4, 1997

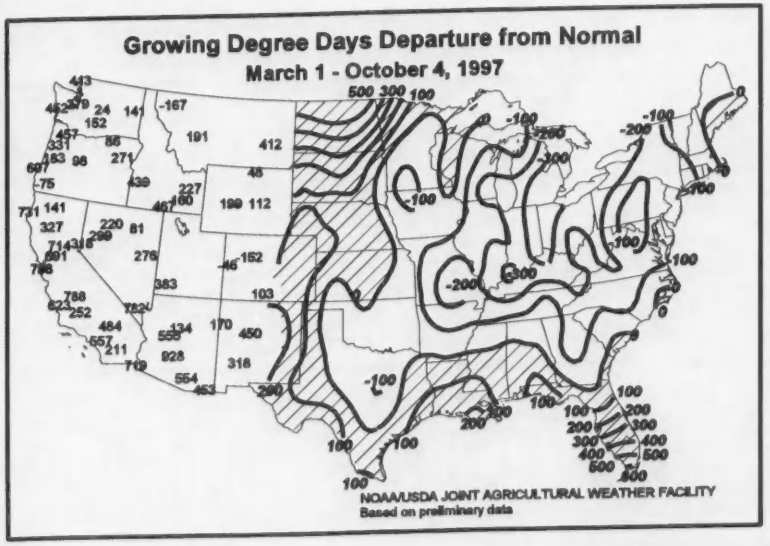


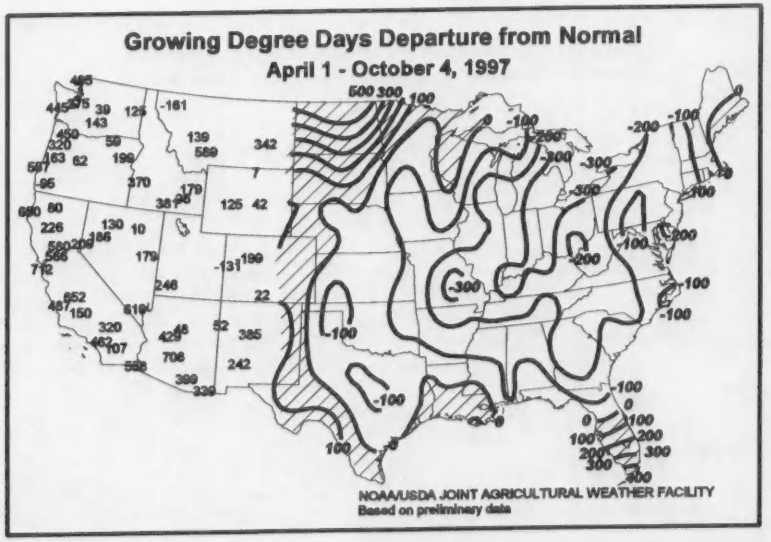
Average Pan Evaporation (Inches/Day)
September 28 - October 4, 1997




Total Growing Degree Days
March 1 - October 4, 1997
Corn
Computed to 50 degree F base with daily maximum temperature limited to 86 degrees F or less and daily minimum to 50 degrees F or more.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary data


Total Growing Degree Days
April 1 - October 4, 1997
Corn
Computed to 50 degree F base with daily maximum temperature limited to 86 degrees F or less and daily minimum to 50 degrees F or more.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary data


Growing Degree Days Departure from Normal
March 1 - October 4, 1997
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary data


Growing Degree Days Departure from Normal
April 1 - October 4, 1997
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary data

National Weather Data for Selected Cities

Weather Data for the Week Ending October 4, 1997

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP, °F		PRECIP.	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	81	56	87	50	68	0	0.00	-0.74	0.00	3.97	92	41.57	97	94	42	0	0	0	0
	HUNTSVILLE	79	54	83	47	66	-1	0.01	-0.80	0.01	5.43	121	43.92	101	94	42	0	0	1	0
	MOBILE	86	64	91	55	75	2	0.00	-0.94	0.00	1.98	31	61.26	118	91	41	1	0	0	0
	MONTGOMERY	84	57	89	53	70	-1	0.01	-0.70	0.01	2.83	64	34.95	83	96	43	0	0	1	0
AK	ANCHORAGE	48	32	52	26	40	-2	0.21	-0.36	0.17	2.53	85	14.88	124	93	59	0	4	2	0
	BARROW	32	25	35	21	29	6	0.19	0.08	0.16	0.70	108	4.71	132	94	78	0	7	3	0
	FAIRBANKS	48	28	53	21	37	1	0.22	0.04	0.20	0.70	66	4.52	53	92	57	0	5	2	0
	JUNEAU	53	38	59	32	44	-2	–	–	–	–	–	–	–	99	64	0	1	-	-
	KODIAK	52	40	56	33	46	1	0.55	-1.15	0.33	7.81	98	47.50	98	92	69	0	0	4	0
	NOME	44	34	49	25	39	4	0.48	0.05	0.15	2.24	85	13.11	110	91	74	0	2	6	0
AZ	FLAGSTAFF	73	42	75	39	57	5	0.02	-0.38	0.02	3.70	164	12.71	74	93	33	0	0	1	0
	PHOENIX	100	80	104	76	90	9	0.00	-0.17	0.00	0.45	47	3.71	66	53	23	7	0	0	0
	PRESCOTT	81	54	84	51	68	8	0.00	-0.30	0.00	3.69	171	13.31	86	78	33	0	0	0	0
	TUCSON	97	70	100	67	84	8	0.00	-0.31	0.00	1.43	78	6.81	73	59	22	7	0	0	0
	YUMA	100	79	104	77	90	8	0.00	-0.06	0.00	4.54	1335	5.11	228	73	29	7	0	0	0
AR	FORT SMITH	88	56	93	47	71	3	0.01	-0.78	0.01	1.36	37	27.70	90	92	34	3	0	1	0
	LITTLE ROCK	88	58	92	54	73	4	0.00	-0.87	0.00	4.15	92	47.20	130	94	32	1	0	0	0
CA	BAKERSFIELD	89	62	99	55	76	3	0.00	-0.04	0.00	0.05	28	3.04	74	64	33	4	0	0	0
	EUREKA	67	53	69	49	60	4	1.20	0.88	1.02	3.25	304	23.39	104	92	69	0	0	3	1
	FRESNO	89	62	99	56	75	5	0.00	-0.07	0.00	0.15	54	4.14	57	72	24	4	0	0	0
	LOS ANGELES	79	67	89	67	73	5	0.00	-0.04	0.00	0.27	77	5.90	72	89	64	0	0	0	0
	REDDING	84	56	95	49	69	0	0.20	-0.10	0.20	1.83	171	19.72	98	76	29	2	0	1	0
	SACRAM/MCCLELL	87	60	97	52	73	–	0.18	–	0.18	0.26	–	9.78	–	74	29	3	0	1	0
	SAN DIEGO	77	70	79	68	73	3	0.00	-0.04	0.00	0.85	340	4.19	64	87	72	0	0	0	0
	SAN FRANCISCO	76	60	90	57	68	5	0.05	-0.08	0.04	0.05	19	9.42	76	84	48	1	0	2	0
CO	ALAMOSA	74	37	76	31	55	6	0.02	-0.17	0.02	1.71	171	6.57	109	89	24	0	1	1	0
	CO SPRINGS	77	46	80	40	62	6	0.00	-0.21	0.00	1.78	123	21.82	150	72	26	0	0	0	0
	DENVER	82	46	87	35	64	7	0.00	-0.25	0.00	0.99	72	17.80	137	58	18	0	0	0	0
	GRAND JUNCTION	77	50	82	47	63	2	0.26	0.05	0.18	3.10	323	11.52	178	77	32	0	0	2	0
	PUEBLO	84	45	88	41	65	5	0.00	-0.14	0.00	0.96	98	11.58	118	80	22	0	0	0	0
CT	BRIDGEPORT	66	51	74	37	59	-2	0.31	-0.38	0.25	0.60	17	27.63	87	80	50	0	0	2	0
	HARTFORD	65	45	72	35	55	-3	0.75	-0.07	0.52	0.99	23	29.15	88	90	56	0	0	4	1
DC	WASHINGTON	73	55	80	44	64	-1	0.71	0.01	0.68	1.59	43	23.78	80	81	48	0	0	2	1
DE	WILMINGTON	70	50	76	34	60	-2	0.52	-0.19	0.38	1.95	51	19.91	83	89	49	0	0	3	0
FL	DAYTONA BEACH	88	69	91	65	79	2	0.41	-0.81	0.24	5.14	74	38.98	100	92	48	3	0	3	0
	JACKSONVILLE	85	64	88	61	75	0	0.02	-1.09	0.01	4.05	53	40.10	91	97	50	0	0	2	0
	KEY WEST	86	74	88	71	80	-2	0.43	-0.79	0.37	6.62	100	32.05	103	93	70	0	0	4	0
	MIAMI	88	75	90	72	81	1	3.06	1.47	2.38	12.44	146	59.83	128	95	61	1	0	3	2
	ORLANDO	89	69	91	66	79	0	0.01	-0.92	0.01	2.59	40	44.53	107	99	49	3	0	1	0
	TAMPA	88	72	90	69	80	2	0.28	-0.57	0.28	13.11	205	44.80	117	88	51	1	0	1	0
	VALPARAISO/EGLIN	87	66	91	57	76	3	0.00	-1.10	0.00	3.54	47	51.72	99	88	48	3	0	0	0
	WEST PALM BEACH	86	73	88	70	80	0	0.56	-1.27	0.51	6.86	72	52.43	109	96	60	0	0	3	1
GA	ATHENS	77	54	85	47	65	-2	0.12	-0.82	0.12	6.79	180	37.54	96	89	47	0	0	1	0
	ATLANTA	76	56	86	52	66	-2	0.43	-0.29	0.43	4.83	126	38.19	96	86	47	0	0	1	0
	AUGUSTA	81	53	89	47	67	-2	0.32	-0.33	0.31	5.89	173	34.96	96	94	44	0	0	2	0
	COLUMBUS	82	58	90	54	70	-1	0.00	-0.58	0.00	2.67	75	37.24	92	87	40	1	0	0	0
	MACON	81	55	89	49	68	-2	0.24	-0.30	0.24	3.54	115	27.12	76	94	43	0	0	1	0
	SAVANNAH	83	61	88	56	72	0	0.08	-0.64	0.04	5.37	111	41.23	98	94	50	0	0	2	0
HI	HILO	86	69	88	67	77	1	1.45	-0.48	0.43	9.46	99	102.99	109	90	58	0	0	6	0
	HONOLULU	89	75	91	74	82	2	0.66	0.31	0.41	1.33	134	16.77	128	86	54	3	0	3	0
	KAHULUI	89	72	91	66	80	2	–	–	–	–	–	–	–	86	55	2	0	-	-
	LIHUE	84	75	86	73	79	1	–	–	–	–	–	–	–	85	69	0	0	-	-
ID	BOISE	80	52	94	44	66	9	0.00	-0.16	0.00	0.67	76	9.18	107	54	19	1	0	0	0
	LEWISTON	74	51	84	46	63	4	0.14	-0.05	0.12	1.12	119	12.20	130	78	33	0	0	2	0
	POCATELLO	74	42	86	33	58	5	0.00	-0.20	0.00	1.67	174	10.86	120	75	28	0	0	0	0
IL	CHICAGO/O'HARE	74	52	87	42	63	4	0.10	-0.58	0.10	1.80	43	26.11	92	80	43	0	0	1	0
	MOLINE	79	52	93	41	66	7	0.02	-0.78	0.02	3.71	83	30.05	94	81	34	1	0	1	0
	PEORIA	77	53	87	44	65	5	0.17	-0.59	0.17	3.29	77	25.63	89	83	42	0	0	1	0
	ROCKFORD	75	50	90	42	63	5	0.00	-0.76	0.00	1.79	43	23.56	81	79	36	1	0	0	0
	SPRINGFIELD	79	53	90	46	66	4	0.00	-0.68	0.00	3.53	95	22.05	79	77	42	1	0	0	0
IN	EVANSVILLE	80	62	86	40	66	3	0.10	-0.54	0.09	1.31	39	39.34	118	88	40	0	0	2	0
	FORT WAYNE	73	49	82	38	61	2	0.01	-0.55	0.01	5.11	171	35.40	132	89	43	0	0	1	0
	INDIANAPOLIS	76	50	86	40	63	2	0.00	-0.59	0.00	1.51	47	28.23	91	90	44	0	0	0	0
	SOUTH BEND	70	48	83	37	59	0	0.56	-0.20	0.24	3.01	76	26.86	90	92	55	0	0	3	0
IA	BURLINGTON	–	–	92	–	–	–	0.00	-0.83	0.00	1.80	39	26.14	89	–	–	-	-	0	0
	CEDAR RAPIDS	–	–	94	–	–	–	0.01	-0.70	0.01	2.20	51	20.81	74	–	–	-	-	1	0
	DES MOINES	81	55	92	50	68	8	0.00	-0.70	0.00	2.63	85	24.95	90	75	33	1	0	0	0
	DUBUQUE	75	51	90	42	63	7	0.12	-0.71	0.12	4.11	80	26.69	86	84	39	1	0	1	0
	SIOUX CITY	86	48	94	43	67	9	0.00	-0.57	0.00	2.43	76	16.69	75	81	28	2	0	0	0
	WATERLOO	81	52	95	39	67	10	0.00	-0.71	0.00	3.83	98	24.00	85	82	29	2	0	0	0
KS	CONCORDIA	85	56	92	50	71	8	0.00	-0.57	0.00	3.72	112	20.59	82	75	29	2	0	0	0
	DODGE CITY	87	56	95	51	72	8	0.05	-0.30	–	2.13	101	21.91	116	75	27	2	0	-	-
	GOODLAND	84	48	92	42	66	8	0.00	-0.28	0.00	0.75	44	14.94	91	74	24	1	0	0	0
	TOPEKA	86	54	93	46	70	8	0.00	-0.81	0.00	2.16	51	22.44	77	82	30	1	0	0	0

Based on 1961-90 normals

Weather Data for the Week Ending October 4, 1997

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP, °F		PRECIP.	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	86	60	92	54	73	8	0.00	-0.67	0.00	3.50	91	29.69	120	77	31	2	0	0	0
KY	JACKSON	72	53	80	44	62	0	0.09	-0.66	0.06	2.03	50	40.22	105	87	49	0	0	2	0
	LEXINGTON	76	50	82	40	63	0	0.00	-0.62	0.00	2.38	67	50.04	143	91	46	0	0	0	0
	LOUISVILLE	80	54	87	44	67	3	0.00	-0.64	0.00	1.29	37	49.66	140	83	35	0	0	0	0
	PADUCAH	81	53	84	43	67	2	0.03	-0.71	0.03	2.41	59	42.98	114	87	40	0	0	1	0
LA	BATON ROUGE	89	59	92	51	74	1	0.01	-0.89	0.01	1.19	22	61.93	108	98	38	3	0	1	0
	LAKE CHARLES	87	64	92	59	75	2	0.00	-1.10	0.00	7.22	116	52.67	125	96	44	1	0	0	0
	NEW ORLEANS	88	66	92	59	77	3	0.00	-0.92	0.00	0.81	14	39.65	81	87	43	3	0	0	0
	SHREVEPORT	88	61	91	56	75	3	0.01	-0.77	0.01	2.41	68	52.18	152	91	40	2	0	1	0
ME	CARIBOU	56	37	65	32	46	-2	0.96	0.25	0.91	2.66	69	28.93	107	96	62	0	2	4	1
	PORTLAND	60	42	69	31	51	-3	1.06	0.29	0.98	2.76	78	28.34	91	89	60	0	1	3	1
MD	BALTIMORE	73	49	83	35	61	-2	0.56	-0.15	0.52	1.47	39	26.89	86	93	46	0	0	3	1
MA	BOSTON	64	50	72	41	57	-3	0.13	-0.57	0.13	1.02	29	22.12	73	86	54	0	0	1	0
	WORCESTER	59	44	64	33	52	-4	0.74	-0.21	0.39	1.71	38	26.57	75	92	59	0	0	4	0
MI	ALPENA	66	42	73	34	54	2	0.17	-0.40	0.12	2.90	85	25.26	111	97	59	0	0	3	0
	GRAND RAPIDS	68	47	79	36	57	2	0.16	-0.64	0.12	4.97	107	25.24	92	94	58	0	0	2	0
	HOUGHTON LAKE	66	44	76	29	55	3	1.21	0.58	0.51	3.98	108	23.01	104	94	55	0	1	3	1
	LANSING	69	45	78	30	57	2	0.17	-0.46	0.09	3.19	82	23.12	97	89	52	0	1	2	0
	MARQUETTE	--	--	--	--	--	--	0.36	-0.55	--	1.36	30	24.63	92	--	--	-	-	-	-
	MUSKEGON	66	48	78	35	57	2	0.26	-0.51	0.20	3.31	77	21.66	90	95	60	0	0	2	0
MN	DULUTH	63	45	78	32	54	5	0.08	-0.65	0.06	1.71	40	20.22	81	95	57	0	1	2	0
	INT'L FALLS	64	44	79	32	54	5	2.21	1.81	1.83	3.97	114	16.40	74	95	60	0	1	3	1
	MINNEAPOLIS	74	52	90	41	63	8	0.03	-0.52	0.03	3.20	108	31.41	132	86	48	1	0	1	0
	ROCHESTER	76	50	93	37	63	9	0.00	-0.66	0.00	1.87	49	26.30	105	82	37	1	0	0	0
	ST. CLOUD	72	45	84	34	59	7	0.01	-0.60	0.01	1.72	49	22.08	94	91	42	0	0	1	0
MS	JACKSON	85	57	90	49	71	0	0.00	-0.73	0.00	2.69	68	45.12	108	98	39	1	0	0	0
	MERIDIAN	85	54	91	47	69	0	0.00	-0.72	0.00	1.85	47	43.84	101	99	41	1	0	0	0
	TUPELO	82	53	88	47	68	-1	0.00	-0.79	0.00	1.73	43	53.04	127	94	38	0	0	0	0
MO	COLUMBIA	82	55	89	48	69	6	0.00	-0.83	0.00	2.29	53	28.90	94	79	37	0	0	0	0
	KANSAS CITY	83	57	91	50	70	8	0.00	-0.98	0.00	3.35	62	25.78	82	74	35	1	0	0	0
	SAINT LOUIS	81	59	89	51	70	5	0.00	-0.65	0.00	2.73	79	25.03	87	74	39	0	0	0	0
	SPRINGFIELD	80	54	86	48	67	4	0.00	-0.95	0.00	3.69	72	30.12	91	89	40	0	0	0	0
MT	BILLINGS	81	51	87	48	66	12	0.03	-0.27	0.03	0.59	38	12.91	103	55	20	0	0	1	0
	BUTTE	71	36	82	29	53	7	0.00	-0.22	0.00	0.56	41	17.59	166	77	26	0	2	0	0
	GLASGOW	77	48	88	41	62	10	0.01	-0.18	0.01	0.56	50	10.71	109	58	23	0	0	1	0
	GREAT FALLS	74	49	85	48	61	9	0.00	-0.23	0.00	0.23	17	12.65	97	55	26	0	0	0	0
	KALISPELL	64	43	74	35	53	6	0.12	-0.11	0.08	1.82	117	15.67	123	87	44	0	0	2	0
	MILES CITY	83	49	94	42	67	13	0.06	-0.20	0.06	0.31	22	9.28	76	58	16	2	0	1	0
	MISSOULA	69	41	81	36	55	5	0.16	-0.04	0.09	0.81	66	13.02	120	87	39	0	0	2	0
NE	GRAND ISLAND	84	51	93	45	67	9	0.00	-0.48	0.00	5.80	188	24.70	112	80	30	1	0	0	0
	LINCOLN	85	50	92	44	67	8	0.00	-0.65	0.00	1.84	48	18.35	75	82	29	2	0	0	0
	NORFOLK	83	49	93	42	66	8	0.00	-0.48	0.00	2.75	101	17.28	78	77	29	1	0	0	0
	NORTH PLATTE	82	43	91	36	63	7	0.00	-0.30	0.00	1.76	101	14.60	84	92	28	1	0	0	0
	OMAHA	83	52	91	45	67	8	0.00	-0.71	0.00	5.10	124	23.05	91	85	33	1	0	0	0
	SCOTTSBLUFF	82	41	89	37	62	6	0.00	-0.23	0.00	0.93	78	18.08	135	82	18	0	0	0	0
	VALENTINE	83	44	95	40	64	9	0.00	-0.27	0.00	1.89	112	18.77	114	85	23	2	0	0	0
NV	ELY	75	36	79	32	56	5	0.00	-0.23	0.00	1.44	124	7.80	96	78	18	0	2	0	0
	LAS VEGAS	91	68	95	64	79	5	0.00	-0.04	0.00	2.08	667	3.50	113	49	19	5	0	0	0
	RENO	80	40	87	34	60	4	0.00	-0.07	0.00	0.55	141	6.15	116	82	21	0	0	0	0
	WINNEMUCCA	80	37	88	26	59	5	0.00	-0.11	0.00	0.28	64	8.63	113	53	15	0	3	0	0
NH	CONCORD	60	41	68	31	51	-3	0.50	-0.17	0.35	1.84	58	25.08	94	88	58	0	2	2	0
NJ	NEWARK	69	52	76	39	60	-3	1.00	0.27	0.93	2.20	54	31.60	93	81	50	0	0	3	1
NM	ALBUQUERQUE	81	56	85	51	68	5	0.06	-0.16	--	2.48	221	10.36	144	82	24	0	0	-	-
NY	ALBANY	61	43	71	34	52	-4	1.24	0.59	1.10	4.13	124	24.70	90	93	65	0	0	5	1
	BINGHAMTON	59	43	70	30	51	-3	0.97	0.27	0.44	2.92	79	22.74	81	97	61	0	1	6	0
	BUFFALO	64	48	75	34	56	-1	2.58	1.87	1.20	5.35	138	31.88	112	87	58	0	0	4	2
	ROCHESTER	64	43	78	32	54	-3	2.65	2.08	1.80	5.76	175	26.87	111	96	62	0	1	5	1
	SYRACUSE	62	44	76	33	53	-3	1.32	0.52	0.59	3.26	77	23.20	79	93	62	0	0	6	1
NC	ASHEVILLE	71	48	77	39	59	-3	0.66	-0.18	0.64	4.89	112	40.90	109	97	49	0	0	3	1
	CHARLOTTE	77	56	85	49	66	-1	0.12	-0.66	0.12	3.39	86	37.03	111	85	41	0	0	1	0
	GREENSBORO	73	51	81	41	62	-2	0.04	-0.79	0.04	3.86	97	32.24	97	90	45	0	0	1	0
	HATTERAS	73	66	80	59	70	0	2.81	1.87	--	8.15	138	40.00	95	83	63	0	0	-	-
	RALEIGH	76	50	84	38	63	-2	0.14	-0.53	0.14	3.07	86	30.77	94	94	43	0	0	1	0
	WILMINGTON	81	59	86	52	70	-1	2.68	1.87	2.68	8.94	164	37.12	82	90	47	0	0	1	1
ND	BISMARCK	80	46	93	36	63	11	0.00	-0.28	0.00	1.73	105	12.21	89	72	23	1	0	0	0
	DICKINSON	79	48	91	43	64	12	0.00	-0.32	0.00	0.16	9	14.95	103	90	18	1	0	0	0
	FARGO	73	45	89	39	59	7	0.20	-0.24	0.20	2.31	103	22.57	136	88	35	0	0	1	0
	GRAND FORKS	72	47	82	39	60	9	0.19	-0.22	0.19	2.45	100	17.38	109	92	44	0	0	1	0
	JAMESTOWN	78	49	89	44	64	12	0.01	-0.30	0.01	0.91	47	18.15	120	72	28	0	0	1	0
	WILLISTON	80	43	92	36	61	11	0.02	-0.23	0.02	0.17	12	10.76	90	70	22	1	0	1	0
OH	AKRON-CANTON	67	47	78	34	57	-1	0.29	-0.34	0.15	2.81	77	27.19	94	90	54	0	0	3	0
	CINCINNATI	76	49	86	37	63	1	0.06	-0.58	0.04	0.56	17	32.70	102	82	38	0	0	2	0
	CLEVELAND	69	51	80	37	60	2	0.48	-0.17	0.30	4.31	113	29.79	102	87	54	0	0	4	0
	COLUMBUS	74	51	85	38	63	3	0.00	-0.53	0.00	1.36	42	31.22	103	81	40	0	0	0	0
	DAYTON	74	50	85	38	62	2	0.24	-0.30	0.16	1.82	64	25.57	90	85	37	0	0	3	0
	MANSFIELD	70	49	82	34	59	1	0.08	-0.51	0.02	3.08	83	33.81	109	87	47	0	0	4	0

Based on 1961-90 normals

Weather Data for the Week Ending October 4, 1997

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP, °F		PRECIP.	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	72	48	83	38	60	3	0.12	-0.41	0.10	4.83	154	33.50	132	89	46	0	0	2	0
	YOUNGSTOWN	66	48	77	35	57	0	0.61	-0.08	0.31	3.99	104	28.46	91	88	55	0	0	5	0
OK	OKLAHOMA CITY	86	61	93	50	75	7	0.00	-0.87	0.00	1.37	32	21.50	79	83	35	3	0	0	0
	TULSA	86	60	92	53	73	5	0.00	-1.00	0.00	3.06	59	33.61	105	79	36	2	0	0	0
OR	ASTORIA	64	55	66	53	60	4	3.12	2.19	1.11	9.83	287	60.72	150	96	78	0	0	5	4
	BURNS	74	33	83	27	53	3	0.00	-0.14	0.00	0.53	79	7.23	104	74	23	0	2	0	0
	EUGENE	68	50	80	45	59	0	1.38	0.92	0.88	4.54	236	29.10	99	90	63	0	0	5	1
	MEDFORD	78	48	91	44	63	3	0.46	0.23	0.46	1.29	132	12.74	116	87	37	1	0	1	0
	PENDLETON	79	49	90	43	64	6	0.09	-0.06	0.09	0.86	126	7.63	94	77	32	1	0	1	0
	PORTLAND	66	54	76	50	61	2	2.33	1.88	0.98	4.13	206	32.61	145	95	68	0	0	5	2
	SALEM	67	53	75	48	60	2	2.40	1.94	0.90	5.93	328	33.45	143	96	71	0	0	6	2
PA	ALLENTOWN	68	46	75	32	57	-2	0.35	-0.39	0.21	3.58	83	31.42	94	89	49	0	1	3	0
	ERIE	68	53	79	40	61	2	1.36	0.43	0.63	3.78	77	31.92	104	83	55	0	0	4	1
	MIDDLETOWN	72	51	82	38	61	1	0.38	-0.34	0.26	2.52	65	24.84	80	86	52	0	0	3	0
	PHILADELPHIA	71	51	78	40	61	-1	0.34	-0.32	0.30	1.59	42	24.11	74	83	44	0	0	2	0
	PITTSBURGH	67	47	78	35	57	-1	1.01	0.42	0.81	3.04	92	28.46	91	92	50	0	0	4	1
	SCRANTON	64	45	75	30	55	-2	0.43	-0.26	0.18	1.97	53	20.91	74	94	70	0	1	5	0
	WILLIAMSPORT	68	46	73	33	56	-2	1.53	0.79	0.99	3.17	83	22.44	72	97	54	0	0	4	1
RI	PROVIDENCE	65	47	73	37	56	-3	0.44	-0.35	0.41	0.97	25	29.41	88	87	54	0	0	2	0
SC	BEAUFORT	83	62	88	57	72	0	0.07	-0.71	0.07	3.37	62	33.94	78	88	48	0	0	1	0
	CHARLESTON	82	62	87	57	72	0	0.24	-0.57	0.24	9.58	185	50.00	116	83	48	0	0	1	0
	COLUMBIA	80	54	88	45	67	-2	1.06	0.35	1.06	4.55	112	34.03	83	89	45	0	0	1	1
	GREENVILLE	75	53	83	45	64	-2	0.04	-0.88	0.04	3.28	73	37.26	93	92	45	0	0	1	0
SD	ABERDEEN	78	40	89	38	59	5	0.00	-0.35	0.00	0.82	40	15.37	93	89	32	0	0	0	0
	HURON	80	47	94	41	64	9	0.00	-0.39	0.00	3.87	199	21.72	123	83	32	1	0	0	0
	RAPID CITY	81	44	91	41	62	8	0.00	-0.28	0.00	0.78	56	19.98	136	67	22	1	0	0	0
	SIOUX FALLS	79	48	89	39	63	8	0.00	-0.56	0.00	1.59	48	17.92	87	80	32	0	0	0	0
TN	BRISTOL	71	47	77	39	59	-3	1.20	0.53	1.17	3.02	84	35.98	112	94	49	0	0	2	1
	CHATTANOOGA	77	53	83	48	65	-1	0.01	-0.81	0.01	5.56	121	45.78	112	97	44	0	0	1	0
	KNOXVILLE	75	53	81	46	64	0	0.00	-0.66	0.00	3.32	97	43.93	121	92	47	0	0	0	0
	MEMPHIS	83	58	86	54	71	2	0.00	-0.69	0.00	6.31	162	60.48	157	79	36	0	0	0	0
	NASHVILLE	79	55	82	46	67	1	0.00	-0.65	0.00	5.72	150	42.94	118	86	39	0	0	0	0
TX	ABILENE	93	66	99	56	79	8	0.00	-0.69	0.00	0.04	1	20.38	103	63	28	8	0	0	0
	AMARILLO	86	55	92	50	71	6	0.00	-0.36	0.00	1.35	62	20.93	121	82	30	2	0	0	0
	AUSTIN	92	67	95	63	80	3	0.00	-0.84	0.00	1.46	39	34.47	140	90	36	7	0	0	0
	BEAUMONT	87	64	91	62	76	1	0.00	-1.21	0.00	5.43	78	41.01	93	93	48	1	0	0	0
	BROWNSVILLE	88	69	90	66	79	0	0.54	-0.56	–	5.31	80	22.40	103	95	58	2	0	-	-
	CORPUS CHRISTI	91	68	92	63	79	1	0.03	-1.02	0.03	1.80	30	22.08	89	92	49	6	0	1	0
	DEL RIO	93	69	96	67	81	6	0.00	-0.65	0.00	1.41	44	19.35	130	83	38	7	0	0	0
	EL PASO	90	64	93	61	77	7	0.00	-0.29	0.00	1.55	84	7.25	100	63	27	4	0	0	0
	FORT WORTH	93	67	96	63	80	6	0.00	-0.85	0.00	2.01	52	31.35	118	78	36	6	0	0	0
	GALVESTON	84	73	87	70	79	2	0.93	-0.07	0.93	9.39	148	44.62	135	83	57	0	0	1	1
	HOUSTON	87	62	89	58	75	1	0.00	-1.09	0.00	4.66	89	43.81	125	96	49	0	0	0	0
	LUBBOCK	89	57	95	51	73	7	0.00	-0.54	0.00	1.96	67	19.19	122	73	24	4	0	0	0
	MIDLAND	92	62	98	56	77	8	0.11	-0.43	0.11	0.97	33	13.84	113	68	25	6	0	1	0
	SAN ANGELO	93	62	97	59	78	7	0.00	-0.73	0.00	1.58	41	20.42	123	78	27	7	0	0	0
	SAN ANTONIO	93	67	94	63	80	5	0.00	-0.79	0.00	1.86	48	24.54	102	91	34	7	0	0	0
	VICTORIA	89	65	90	62	77	1	0.71	-0.40	0.71	6.05	98	51.15	170	97	56	1	0	1	1
	WACO	95	68	98	63	81	8	0.00	-0.86	0.00	0.49	12	28.91	117	85	32	7	0	0	0
	WICHITA FALLS	93	65	98	57	79	9	0.00	-0.81	0.00	0.70	17	16.54	70	77	28	5	0	0	0
UT	SALT LAKE CITY	79	49	87	41	64	5	0.00	-0.33	0.00	1.50	102	13.55	110	76	31	0	0	0	0
VT	BURLINGTON	60	42	68	35	51	-2	1.17	0.50	0.92	3.14	86	23.70	90	91	61	0	0	3	1
VA	LYNCHBURG	72	48	81	36	60	-3	0.00	-0.81	0.00	3.38	91	28.71	85	94	46	0	0	0	0
	NORFOLK	75	56	82	44	66	-1	0.04	-0.75	0.04	1.97	45	25.51	71	89	46	0	0	1	0
	RICHMOND	76	52	83	39	64	0	0.38	-0.40	0.38	0.85	22	23.22	69	87	43	0	0	1	0
	ROANOKE	72	50	82	38	61	-1	0.04	-0.80	0.04	3.44	86	29.20	92	87	48	0	0	1	0
	WASH/DULLES	71	48	81	32	60	-1	0.76	0.03	0.68	3.04	81	25.59	83	92	51	0	1	2	1
WA	HANFORD	78	51	83	45	63	–	0.01	-0.04	0.01	0.33	100	4.16	105	74	41	0	0	1	0
	OLYMPIA	65	53	73	47	59	5	1.45	0.77	0.98	5.95	225	46.43	152	94	73	0	0	2	1
	QUILLAYUTE	63	51	68	50	57	3	7.51	5.77	2.65	16.04	271	94.74	145	94	70	0	0	6	4
	SEATTLE-TACOMA	63	53	71	49	58	2	1.87	1.33	0.67	5.15	235	33.94	151	92	73	0	0	5	2
	SPOKANE	71	48	86	41	60	7	0.10	-0.07	0.08	1.02	126	12.87	116	82	39	0	0	2	0
	YAKIMA	72	45	77	39	59	3	0.15	0.07	0.13	0.39	89	3.99	78	90	48	0	0	3	0
WV	BECKLEY	66	46	77	32	56	-1	0.36	-0.36	0.34	1.48	40	31.71	98	90	50	0	1	2	0
	CHARLESTON	71	48	81	39	60	-2	0.81	0.15	0.80	1.94	54	35.39	107	92	56	0	0	2	1
	ELKINS	66	43	77	34	55	-1	2.10	1.34	1.70	3.88	93	33.80	98	90	54	0	0	3	1
	HUNTINGTON	72	49	82	37	61	-1	0.00	-0.62	0.00	1.29	39	31.77	98	93	47	0	0	0	0
WI	EAU CLAIRE	72	50	89	41	61	7	0.10	-0.62	0.10	3.35	78	26.79	99	87	45	0	0	1	0
	GREEN BAY	69	47	81	35	58	4	0.33	-0.31	0.31	2.77	73	25.52	110	89	53	0	0	3	0
	MADISON	72	50	86	37	61	6	0.09	-0.52	0.08	1.39	38	24.94	99	85	44	0	0	2	0
	MILWAUKEE	71	51	84	40	61	5	0.02	-0.63	0.02	2.90	78	29.32	113	86	48	0	0	1	0
WY	CASPER	77	43	82	35	60	8	0.00	-0.23	0.00	1.22	114	10.36	101	62	17	0	0	0	0
	CHEYENNE	74	44	79	40	59	7	0.00	-0.23	0.00	2.06	148	18.01	141	85	23	0	0	0	0
	LANDER	76	43	82	36	59	7	0.00	-0.28	0.00	1.18	94	11.07	104	58	18	0	0	0	0
	SHERIDAN	79	41	86	36	60	8	0.01	-0.30	0.01	0.96	62	13.10	110	79	27	0	0	1	0

NOTE: The rainfall data have been corrected through September 30. Problems continue for the October 1-4 data, so some totals in the table are likely underestimating the true totals. We expect to have the problem fixed in next week's table. September monthly data are corrected, but the Climate Prediction Center has not corrected the daily and weekly data. For an Internet listing of NOAA locations providing historical data, see: **www.nws.noaa.gov/climate.shtml.**

September Weather Summary

Major crop areas of the Midwest escaped the month without a significant freeze, although frost dotted the northwestern Corn Belt on September 21. Three days later, frost was scattered across areas from Lower Michigan into the Northeast. Warm, drier-than-normal weather in the western Corn Belt promoted crop development, but cool conditions in the eastern Corn Belt hindered crop progress. Meanwhile, the Southeast received significant relief from a 2-month dry spell during a late-month storm, but dryness persisted in many areas from Texas to the Delta. The same storm produced excessive rainfall in west-central Peninsular Florida, but began to dent moisture deficits that had been accumulating in coastal Texas since June.

The tropical Atlantic remained uncharacteristically quiet during September. Hurricane Erika, whose fury remained mostly at sea, was the only named storm during the month. The last time only one tropical-storm strength system formed in September was 1946, and the previous occurrence of only one formation in August-September was in 1929. In contrast, the Southwest endured a tropical-storm strike (Nora on September 25) for only the fourth time on record. Farther north, the autumn rainy season began quickly across the Pacific Northwest. Meanwhile, the central Plains received beneficial moisture for winter wheat establishment, even though monthly temperatures averaged 1 to 3°F above normal. Dry weather prevailed on the northern Plains, however, where monthly departures ranged from +2 to +6°F. Temperatures averaged as much as 3°F below normal in the eastern Great Lakes States.

In California, Eureka opened the month in the midst of a record-setting 14-day string (August 21 to September 3) of 70-degree maxima, fueled by unusually high sea-surface temperatures. Except for a few days, warm weather also prevailed throughout the Western and Central States. Late in the month, temperatures in the San Francisco Bay region soared to the highest levels of the year to date at locations such as Santa Rosa (98°F on September 24) and downtown San Francisco (97°F on September 23). In Arizona, Tucson's average temperature of 84.2°F was 3.8° above normal and their third-highest September value on record. On September 9, Austin, TX recorded 100°F, their first triple-digit heat of the year. Midland, TX noted 101°F on September 17. A day later in Kansas, Wichita's high of 100°F represented their first triple-digit heat since July 1 and second such day of the year.

Several long-term climate anomalies persisted in September. In Florida, Miami Beach received record rainfall (58.16 inches) during the first 9 months of the year. Nearby Miami received 12.44 inches (259% of normal) during September. Farther west, several locations in Oregon posted record water-year (October 1 - September 30) precipitation, including Astoria (101.19 inches, or 152% of normal), Eugene (79.50 inches; 161%), Salem (61.27 inches; 156%), and Portland (58.95 inches; 162%). Astoria also posted a monthly record rainfall of 7.27 inches, fueled by a September daily-record total of 2.67 inches on the 16th. In Washington, water-year totals wound up at 131% of normal at both Quillayute (137.76 inches) and the Paradise Ranger Station (150.87 inches). In Utah, water-year precipitation records were established in Kanab (28.54 inches; 215%) and Trenton (30.65 inches; 165%).

Tropical Storm Nora's strike near Yuma, AZ on September 25 marked the first such occurrence since Kathleen's arrival on September 10, 1976. Kathleen's track, just west of Nora's, produced the strongest sustained winds (57 mph in Yuma) in the United States associated with an eastern Pacific tropical system. The highest U.S. sustained winds attributed to Nora, also at Yuma, were clocked at 40 mph, with gusts to 54 mph. Damaging winds occurred as far north as the higher elevations of southern Utah. Other tropical storms to reach the Southwest were Joanne, which hit Arizona in October 1972, and an unnamed system--the only tropical storm on record to strike coastal California--in September 1939. Nora weakened quickly while traversing the lower Colorado River Basin, but produced 5.75 inches in Bagdad, AZ and 4.57 inches atop Mt. Laguna, CA. The storm also ended Los Angeles' record-setting dry spell at 219 days. A few days earlier, on September 15, remnant moisture from Hurricane Linda, formerly the strongest eastern Pacific Hurricane on record (185 mph), ended San Diego's record-tying dry spell at 164 days. In Las Vegas, NV, the combination of monsoonal moisture and Nora's rains resulted in a monthly rainfall of 2.06 inches, second only to a 3.39-inch total in September 1939.

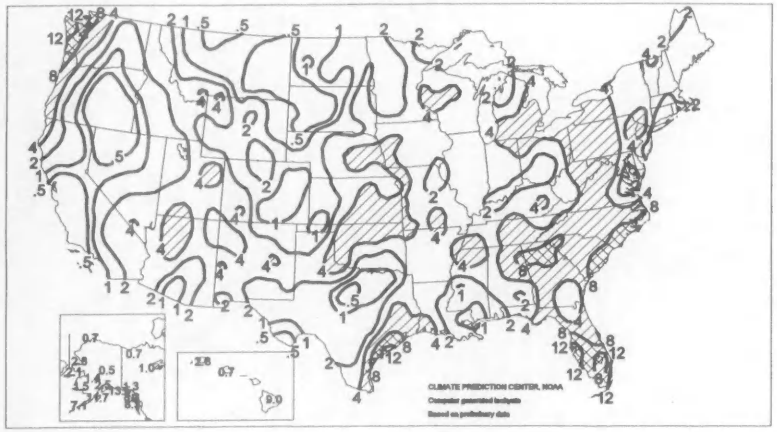
On September 26-27, rainfall locally topped 14 inches near Tampa, FL. Two-day totals reached 14.50 inches in Pinellas Park, 13.05 inches in Ruskin, and 9.74 inches in Tampa. Tampa's 24-hour total of 8.45 inches was their greatest on record in September and third highest ever. Coastal Texas also netted heavy rain, primarily from September 19-24, including 12.53 inches in Palacios and 4.43 inches in Brownsville. Significant rain also dampened the central Plains, providing moisture for newly planted winter wheat, and the Southeast, boosting topsoil moisture. Little rain reached the Delta, however, leaving New Orleans, LA with a September rainfall of 0.81 inches, their third driest on record. New Orleans' August-September total of 3.06 inches was their driest such period since 1899. In Texas, only 0.04 inches fell in Abilene. Dry spots also lingered or developed in the Middle Atlantic and Northeastern States. In Connecticut, Hartford's total of 0.98 inches was their sixth-lowest September rainfall. Richmond, VA received only 0.84 inches during the month. Another dry spot was the northern Plains, where monthly rainfall included 0.16 inches in Dickinson, ND and 0.23 inches in Great Falls, MT.

From September 4-8, more than 125 daily-record lows were reported across the Midwest and Southeast, but scattered frost was confined to areas from the northern Red River Valley to Lower Michigan. The growing season ended across parts of the northern Plains on September 19-20, but only scattered frost dotted the upper Midwest on September 21. Hettinger, ND reported 21°F on the 20th; Sioux City, IA notched a daily-record low of 32°F a day later. On September 24, Lansing, MI recorded 32°F. The chilly episodes had little impact on Corn Belt crops, which matured under generally favorable conditions.

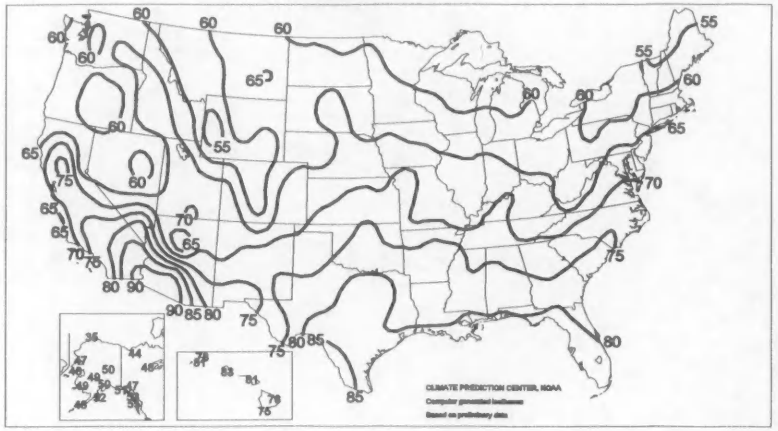
Alaskan temperatures ranged from 1 to 6°F above normal, while above-normal precipitation was confined to southern and northwestern areas. In Nome, September temperatures were the highest on record (5.9°F above normal) and remained above freezing for the second time (the other year was 1989) since records began in 1906. Kodiak's September rainfall of 11.69 inches was their sixth highest on record, boosted by a 2.82-inch total on the 21st. In Hawaii, temperatures averaged 1 to 2°F above normal. On September 14, Kahului's high of 96°F tied their monthly record.

("September Crop Summary" will appear in next week's WWCB.*)*

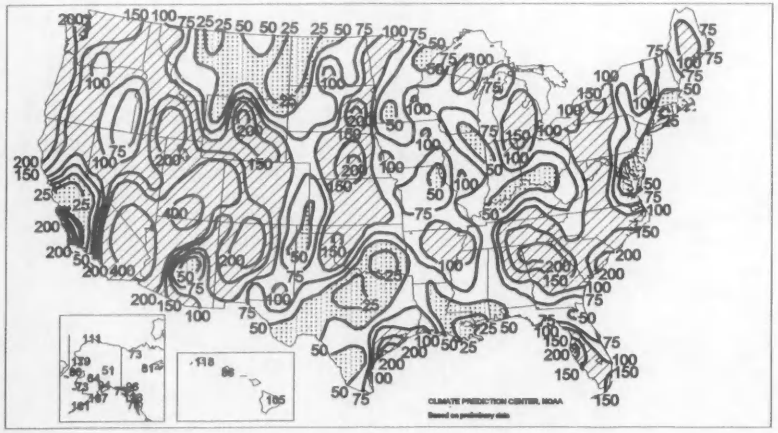
Total Precipitation (Inches)
September 1997



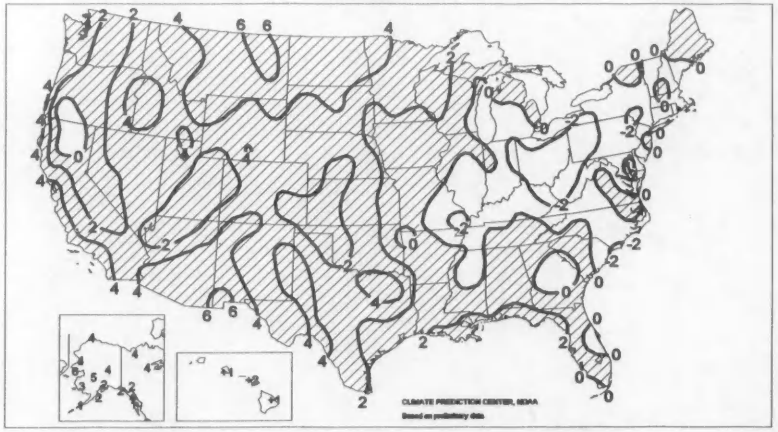
Average Temperature (°F)
September 1997



Percent of Normal Precipitation
September 1997



Departure of Average Temperature from Normal (°F)
September 1997



TEMPERATURE AND PRECIPITATION SUMMARY
September 1997

STATES AND STATIONS		TEMP, °F		PRECIP.	
		AVERAGE	DEPART	TOTAL	DEPARTURE
AL	BIRMINGHAM	75	2	3.97	0.04
	HUNTSVILLE	73	1	5.42	1.34
	MOBILE	79	1	1.98	-3.93
	MONTGOMERY	77	0	2.83	-1.26
AK	ANCHORAGE	50	2	2.53	-0.17
	BARROW	35	4	0.66	0.07
	FAIRBANKS	50	4	0.48	-0.47
	JUNEAU	53	4	8.26	1.53
	KODIAK	52	2	11.69	4.70
	NOME	48	6	2.09	-0.34
AZ	FLAGSTAFF	59	2	3.68	1.66
	PHOENIX	90	4	0.45	-0.42
	PRESCOTT	69	4	3.69	1.69
	TUCSON	84	4	1.43	-0.24
	YUMA	90	3	4.54	4.23
AR	FORT SMITH	75	1	1.36	-1.58
	LITTLE ROCK	76	2	4.15	0.07
CA	BAKERSFIELD	76	1	0.05	-0.11
	EUREKA	62	5	2.05	1.16
	FRESNO	77	3	0.15	-0.09
	LOS ANGELES	75	5	0.27	-0.06
	REDDING	73	-1	1.63	0.73
	SACRAM/MCCLELL	76	–	0.08	–
	SAN DIEGO	75	4	0.85	0.81
	SAN FRANCISCO	69	4	0.00	-0.20
CO	ALAMOSA	58	3	1.89	0.80
	CO SPRINGS	62	2	1.76	0.48
	DENVER	64	2	0.99	-0.35
	GRAND JUNCTION	67	0	2.84	2.02
	PUEBLO	67	1	0.98	0.06
CT	BRIDGEPORT	65	-1	0.60	-2.47
	HARTFORD	63	0	0.98	-2.81
DC	WASHINGTON	71	-1	1.59	-1.72
DE	WILMINGTON	66	-2	1.95	-1.48
FL	DAYTONA BEACH	79	0	4.75	-1.59
	JACKSONVILLE	78	0	4.05	-3.00
	KEY WEST	82	-1	6.50	0.65
	MIAMI	81	0	12.44	4.81
	ORLANDO	80	-1	2.59	-3.42
	TAMPA	81	1	12.84	6.86
	VALPARAISO/EGLIN	81	3	3.54	-3.39
	WEST PALM BEACH	81	0	6.83	-1.70
GA	ATHENS	72	-1	6.79	3.43
	ATLANTA	73	0	4.83	1.41
	AUGUSTA	74	-1	5.89	2.87
	COLUMBUS	77	1	2.67	-0.56
	MACON	76	0	3.54	0.76
	SAVANNAH	77	0	5.33	0.86
HI	HILO	78	2	8.97	0.45
	HONOLULU	83	2	0.67	-0.11
	KAHULUI	81	2	–	–
	LIHUE	80	0	2.79	0.42
ID	BOISE	68	5	0.67	-0.13
	LEWISTON	67	3	0.98	0.20
	POCATELLO	61	3	1.67	0.82
IL	CHICAGO/OHARE	64	0	1.70	-2.12
	MOLINE	66	1	3.69	-0.33
	PEORIA	66	0	3.12	-0.76
	ROCKFORD	63	0	1.79	-2.01
	SPRINGFIELD	67	0	3.53	0.20
IN	EVANSVILLE	68	-1	1.31	-1.66
	FORT WAYNE	63	-2	5.11	2.44
	INDIANAPOLIS	66	-1	1.51	-1.36
	SOUTH BEND	62	-2	2.88	-0.74
IA	BURLINGTON	–	–	1.80	-2.31
	CEDAR RAPIDS	66	2	2.20	-1.70
	DES MOINES	66	1	2.53	-1.00
	DUBUQUE	62	1	4.11	-0.58
	SIOUX CITY	65	2	2.43	-0.45
	WATERLOO	63	1	3.83	0.32
KS	CONCORDIA	70	2	3.72	0.71
	DODGE CITY	70	2	2.08	0.17
	GOODLAND	66	2	0.75	-0.82
	TOPEKA	70	2	2.15	-1.66
	WICHITA	73	2	3.50	0.01
KY	JACKSON	66	-2	2.03	-1.63
	LEXINGTON	66	-2	2.38	-0.82
	LOUISVILLE	70	1	2.25	-0.91
	PADUCAH	69	-1	2.41	-1.28
LA	BATON ROUGE	79	1	1.18	-3.67
	LAKE CHARLES	80	2	7.22	1.53
	NEW ORLEANS	81	3	0.81	-4.70
	SHREVEPORT	78	2	2.41	-0.71
ME	CARIBOU	54	0	2.63	-0.82
	PORTLAND	59	0	2.69	-0.41
MD	BALTIMORE	67	-1	1.47	-1.94
MA	BOSTON	64	-1	1.02	-2.04
	WORCESTER	60	0	1.44	-2.67
MI	ALPENA	57	0	2.86	-0.25
	GRAND RAPIDS	61	0	4.85	0.61
	HOUGHTON LAKE	58	-1	3.45	0.03
	LANSING	59	-2	3.10	-0.46
	MARQUETTE	–	–	1.36	4.08
	MUSKEGON	60	-1	3.11	-0.77
MN	DULUTH	57	3	1.71	-2.13
	INT'L FALLS	56	3	3.90	0.75
	MINNEAPOLIS	62	2	3.20	0.48
	ROCHESTER	60	1	1.87	-1.60
	ST. CLOUD	60	3	1.72	-1.44
MS	JACKSON	77	1	2.69	-0.86
	MERIDIAN	76	0	1.86	-1.67
	TUPELO	73	-1	1.73	-1.88
MO	COLUMBIA	68	0	2.29	-1.57
	KANSAS CITY	69	2	3.36	-1.51
	SAINT LOUIS	70	0	2.73	-0.39
	SPRINGFIELD	69	0	3.69	-0.93
MT	BILLINGS	64	5	0.56	-0.81
	BUTTE	55	4	0.56	-0.70
	GLASGOW	63	6	0.55	-0.45
	GREAT FALLS	61	4	0.23	-1.01
	KALISPELL	58	3	1.50	0.24
	MILES CITY	66	7	0.25	-1.03
	MISSOULA	58	3	0.65	-0.47
NE	GRAND ISLAND	66	2	5.80	2.95
	LINCOLN	68	2	1.84	-1.64
	NORFOLK	65	2	2.75	0.30
	NORTH PLATTE	64	3	1.78	0.15
	OMAHA	67	1	5.10	1.38
	SCOTTSBLUFF	63	2	0.93	-0.17
	VALENTINE	65	4	1.89	0.36
NV	ELY	59	3	1.44	0.43
	LAS VEGAS	82	1	2.08	1.78
	RENO	63	2	0.55	0.16
	WINNEMUCCA	62	2	0.28	-0.12
NH	CONCORD	60	1	1.69	-1.11
NJ	NEWARK	67	-2	2.20	-1.46
NM	ALBUQUERQUE	71	3	2.43	1.43
NY	ALBANY	60	-1	4.10	1.16
	BINGHAMTON	58	-2	2.87	-0.45
	BUFFALO	60	-2	5.08	1.57
	ROCHESTER	59	-3	5.38	2.39
	SYRACUSE	60	-2	2.75	-1.04
NC	ASHEVILLE	66	0	4.89	1.02
	CHARLOTTE	73	1	3.39	-0.11
	GREENSBORO	69	-1	3.88	0.36
	HATTERAS	73	-1	8.15	2.88
	RALEIGH	71	0	3.07	-0.12
	WILMINGTON	74	-2	8.94	3.90
ND	BISMARCK	62	5	1.73	0.24
	DICKINSON	62	5	0.16	-1.51
	FARGO	62	4	2.31	0.32
	GRAND FORKS	62	6	2.45	0.07
	JAMESTOWN	64	6	0.90	-0.86
	WILLISTON	61	5	0.15	-1.19
OH	AKRON-CANTON	61	-3	2.69	-0.63
	CINCINNATI	65	-2	0.55	-2.33
	CLEVELAND	62	-1	4.25	0.81
	COLUMBUS	65	-1	1.36	-1.60
	DAYTON	64	-2	1.66	-0.89
	MANSFIELD	62	-2	3.08	-0.31
	TOLEDO	62	-1	4.73	0.98
	YOUNGSTOWN	60	-2	3.91	0.43
OK	OKLAHOMA CITY	76	2	1.37	-2.47
	TULSA	74	1	3.06	-1.64
OR	ASTORIA	62	4	7.27	4.38
	BURNS	57	2	0.53	-0.03
	EUGENE	63	0	3.21	1.54
	MEDFORD	66	1	0.83	-0.03
	PENDLETON	65	2	0.77	0.18
	PORTLAND	66	3	1.98	0.23
	SALEM	64	3	3.76	2.21
PA	ALLENTOWN	62	-3	3.58	-0.36
	ERIE	62	-2	3.15	-1.24
	MIDDLETOWN	67	1	2.52	-0.99
	PHILADELPHIA	67	-1	1.59	-1.83
	PITTSBURGH	62	-2	2.92	-0.05
	SCRANTON	60	-2	1.92	-1.39
	WILLIAMSPORT	62	-1	3.15	-0.24
RI	PROVIDENCE	64	0	0.97	-2.51
SC	BEAUFORT	77	1	3.37	-1.61
	CHARLESTON	78	0	9.58	4.86
	COLUMBIA	75	0	4.55	0.88
	GREENVILLE	72	1	3.26	-0.70
SD	ABERDEEN	62	2	0.82	-1.04
	HURON	64	3	3.87	2.15
	RAPID CITY	63	3	0.78	-0.45
	SIOUX FALLS	62	2	1.59	-1.43
TN	BRISTOL	68	-2	3.02	-0.23
	CHATTANOOGA	72	0	5.56	1.41
	KNOXVILLE	72	2	3.32	0.26
	MEMPHIS	75	0	6.31	2.77
	NASHVILLE	72	0	5.72	2.25
TX	ABILENE	79	3	0.04	-3.17
	AMARILLO	72	3	1.35	-0.64
	AUSTIN	81	1	1.46	-1.84
	BEAUMONT	80	1	5.43	-0.88
	BROWNSVILLE	82	0	4.77	-1.23
	CORPUS CHRISTI	82	2	2.56	-2.06
	DEL RIO	84	4	1.41	-1.42
	EL PASO	78	4	1.55	-0.15
	FORT WORTH	80	3	2.01	-1.38
	GALVESTON	81	2	8.47	2.54
	HOUSTON	79	1	4.86	-0.03
	LUBBOCK	75	4	1.96	-0.64
	MIDLAND	77	4	0.86	-1.76
	SAN ANGELO	78	3	1.56	-1.85
	SAN ANTONIO	82	3	1.86	-1.55
	VICTORIA	80	1	5.34	-0.26
	WACO	81	3	0.49	-3.03
	WICHITA FALLS	79	3	0.70	-3.12
UT	SALT LAKE CITY	68	3	1.50	0.22
VT	BURLINGTON	58	0	2.98	-0.32
VA	LYNCHBURG	66	-2	3.30	0.14
	NORFOLK	72	0	1.97	-1.93
	RICHMOND	70	0	0.84	-2.50
	ROANOKE	68	0	3.44	-0.06
	WASH/DULLES	65	-2	3.04	-0.32
WA	HANFORD	67	–	0.32	0.01
	OLYMPIA	61	3	4.58	2.32
	QUILLAYUTE	60	3	12.82	7.94
	SEATTLE-TACOMA	62	2	3.41	1.53
	SPOKANE	62	3	0.93	0.20
	YAKIMA	62	2	0.24	-0.16
WV	BECKLEY	61	-2	1.48	-1.87
	CHARLESTON	65	-3	1.94	-1.30
	ELKINS	60	-2	3.52	-0.24
	HUNTINGTON	65	-3	1.29	-1.64
WI	EAU CLAIRE	61	2	3.35	-0.56
	GREEN BAY	60	1	2.76	-0.71
	MADISON	60	0	1.38	-1.99
	MILWAUKEE	61	0	2.90	-0.48
WY	CASPER	60	2	1.22	0.28
	CHEYENNE	59	2	2.06	0.79
	LANDER	61	2	1.16	0.06
	SHERIDAN	60	3	0.95	-0.42
PR	SAN JUAN	–	–	3.56	-2.43

Based on 1961-90 normals.

National Agricultural Summary

September 29 - October 5, 1997

HIGHLIGHTS

Hot, dry weather from California to the Appalachian Mountains pushed crops to maturity and allowed fieldwork to rapidly proceed. Farmers in the Plains and Midwest took advantage of the record or near-record warmth to harvest fall crops and plant winter wheat. Unseasonably hot weather in the Southwest helped cotton fields to dry out after Tropical Storm Nora. Early-week moisture fell along the northern Atlantic coast, but came too late to help most crops. Heavy rainfall in western Oregon and Washington slowed most fieldwork.

Corn: Corn was mature on 82 percent (%) of the Nation's acreage, ahead of 77% mature at this time last year and 79% for the 5-year average. Very warm, dry weather rapidly pushed the crop to maturity in the major corn-producing States, especially in the upper Mississippi Valley. Above-normal temperatures provided much-needed heat for Indiana fields. However, high winds caused lodging, breaking stalks, and dropping ears in some Corn Belt fields. Above-normal temperatures benefited the corn crop in Michigan and Ohio, but maturity remained well behind the normal pace. Nationwide, corn harvest reached 15% complete, compared with 14% in 1996 and the average of 16%. Harvest was most active in Kansas and Missouri. The corn crop remained in mostly good condition.

Soybeans: Soybeans were dropping leaves on 86% of the acreage, ahead of 73% dropping leaves a year ago and the average of 80%. Thirty-seven percent of the soybean acreage was harvested, well ahead of 15% harvested in 1996 and the average of 23%. Iowa and Minnesota farmers harvested about half of their States' acreage during the week. Harvest was also very active in Illinois, where 35% of the State's acreage was harvested at record pace. Harvest was active, but just behind normal in the eastern Corn Belt. Elsewhere, harvest was ahead of the average pace. Late-planted soybean harvest was just underway in Louisiana. Soybeans remained in mostly good to fair condition.

Cotton: Bolls were opening on 83% of the Nation's cotton acreage, 1 percentage point ahead of last year and 4 points ahead of the average. Much-needed heat in Texas helped bolls to open. Crop development remained behind normal in the eastern cotton-producing States. Cotton harvest was 18% complete, behind 24% for both 1996 and the average. Harvest progressed ahead of normal in Arizona and California, but was behind normal farther east. Harvest was just starting in northern Texas, while winding down in southern areas. Cotton defoliation was active throughout the Southeast. The cotton crop rated mostly good to fair.

Rice: Rice harvest reached 82% complete, ahead of both 81% last year and the average of 77%. Hot and humid, but dry, weather allowed Arkansas rice growers to make good harvest progress. In California, harvest was in full swing and beginning to wind down in the Sacramento Valley. Southern Louisiana growers prepared to harvest a few fields of second crop rice. In Texas, harvest resumed after heavy rainfall in late September.

Sorghum: Sorghum was mature on 78% of the national acreage, ahead of both 74% last year and the average of 69%. Very warm, dry weather pushed crops to maturity in the central Plains and Corn Belt. Maturity lagged behind normal in Colorado and New Mexico due to cool, wet weather during August. Sorghum harvest was 36% complete, ahead of 33% harvested in 1996 but behind the average of 37%. Despite hot, dry weather, harvest progressed behind the normal pace in Texas. Farmers harvested fields ahead of the normal pace in the central Plains and Southeast.

Peanuts: Nearly half of the peanut acreage was harvested, well ahead of harvest progress in 1996. Rainfall in Georgia and Florida replenished dry soils, enabling harvest to proceed. Harvest gained momentum in North Carolina and Oklahoma. In Virginia, farmers made good progress, but harvest lagged behind the normal pace. Condition of the peanut crop rated mostly fair to good.

Winter Wheat: Planting of the 1998 winter wheat crop advanced to 58% complete, 7 points ahead of last year and 2 points ahead of the average. Very warm, dry weather across the interior United States allowed seeding to progress rapidly in many winter wheat-producing States, especially Kansas, Oklahoma, and Oregon. Thirty-two percent of the acreage was emerged by week's end, ahead of 27% emerged in 1996 and the average of 31%. Emergence was significantly ahead of normal in Colorado, Montana, and Washington after good planting weather in September.

Crop Progress and Condition

Week Ending October 5, 1997

Soybeans Percent Dropping Leaves

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
AL	68	57	49	51
AR	40	23	43	36
GA	76	64	62	59
IL	91	76	69	86
IN	95	84	77	93
IA	99	81	81	89
KS	89	80	81	84
KY	56	35	51	56
LA	90	75	74	69
MI	70	51	66	86
MN	99	96	97	90
MS	77	68	71	68
MO	82	60	53	67
NE	98	91	89	93
NC	29	24	33	33
OH	88	74	69	92
SC	24	17	14	16
SD	99	94	95	91
TN	58	38	64	57
ALL	86	72	73	80

These 19 States produced 94% of the 1996 soybean crop.

Soybeans Percent Harvested

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
AL	8	3	9	7
AR	14	7	16	11
GA	7	1	2	4
IL	46	11	15	33
IN	27	6	11	29
IA	56	7	19	28
KS	30	6	14	20
KY	11	7	3	7
LA	60	41	41	33
MI	8	3	6	13
MN	69	14	18	20
MS	47	34	31	27
MO	25	4	10	13
NE	30	5	18	32
NC	4	0	5	2
OH	19	4	11	25
SC	2	0	2	1
SD	36	8	12	18
TN	6	2	4	4
ALL	37	9	15	23

These 19 States produced 94% of the 1996 soybean crop.

Winter Wheat Percent Planted

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
AR	4	1	9	8
CA	0	0	1	1
CO	93	81	77	87
GA	1	1	2	4
ID	59	40	58	56
IL	12	3	5	13
IN	20	11	13	21
KS	60	32	50	61
MI	40	21	27	40
MO	20	7	15	16
MT	77	66	60	62
NE	93	72	83	91
NC	10	8	14	15
OH	19	2	11	24
OK	60	28	43	58
OR	50	24	31	40
SD	95	86	71	89
TX	59	49	73	60
WA	90	78	87	78
ALL	58	40	51	56

These 19 States produced 92% of the 1996 winter wheat crop.

Winter Wheat Percent Emerged

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
AR	1	0	4	3
CA	0	0	0	0
CO	76	48	49	61
GA	0	0	1	2
ID	25	16	18	21
IL	1	0	1	2
IN	5	4	2	3
KS	28	15	22	32
MI	10	5	10	17
MO	4	0	4	4
MT	38	34	15	20
NE	68	50	48	65
NC	0	0	0	0
OH	1	0	3	3
OK	22	9	17	23
OR	21	8	9	14
SD	70	54	47	68
TX	34	24	49	36
WA	72	55	67	59
ALL	32	21	27	31

These 19 States produced 92% of the 1996 winter wheat crop.

Cotton Percent Bolls Opening

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
AL	71	61	85	78
AZ	100	100	100	100
AR	90	79	94	86
CA	100	100	100	99
GA	77	69	86	83
LA	97	91	100	98
MS	88	85	99	97
MO	97	85	91	85
NM	84	80	91	86
NC	79	65	92	94
OK	62	49	55	54
SC	77	70	89	87
TN	92	83	98	96
TX	76	65	65	62
ALL	83	74	82	79

These 14 States produced 99% of the 1996 cotton crop.

Cotton Percent Harvested

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
AL	8	6	25	20
AZ	30	25	20	24
AR	15	5	27	21
CA	15	10	14	10
GA	10	6	19	18
LA	40	21	44	45
MS	21	8	46	36
MO	20	5	30	21
NM	3	2	9	3
NC	3	1	15	14
OK	1	0	1	7
SC	8	6	32	17
TN	13	3	36	22
TX	23	20	19	27
ALL	18	12	24	24

These 14 States produced 99% of the 1996 cotton crop.

Crop Progress and Condition

Week Ending October 5, 1997

Corn Percent Mature

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
CO	81	63	81	65
GA	100	100	100	100
IL	86	56	80	87
IN	86	52	68	83
IA	96	80	82	84
KS	97	83	94	92
KY	82	65	94	91
MI	24	15	50	52
MN	92	45	81	68
MO	98	89	93	90
NE	86	67	84	84
NC	100	96	100	100
OH	32	17	36	63
PA	50	30	55	49
SD	85	60	75	69
TX	96	92	98	96
WI	50	25	45	57
ALL	82	59	77	79

These 17 States produced 90% of the 1996 corn crop.

Corn Percent Harvested

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
CO	10	2	10	8
GA	94	92	90	92
IL	13	4	14	15
IN	5	4	8	13
IA	8	3	5	10
KS	47	24	30	40
KY	34	22	44	47
MI	2	1	5	8
MN	6	2	6	6
MO	50	28	43	34
NE	11	4	6	10
NC	71	65	70	72
OH	1	0	6	9
PA	10	7	14	10
SD	7	2	6	7
TX	86	76	83	84
WI	4	1	5	7
ALL	15	9	14	16

These 17 States produced 90% of the 1996 corn crop.

Sorghum Percent Mature

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
AR	96	92	100	98
CO	14	4	32	40
IL	71	38	53	69
KS	73	51	69	59
LA	100	100	100	100
MS	96	92	100	100
MO	84	69	79	74
NE	87	71	68	68
NM	14	9	35	31
OK	67	56	45	34
SD	88	62	85	68
TX	86	78	87	86
ALL	78	63	74	69

These 12 States produced 99% of the 1996 sorghum crop.

Sorghum Percent Harvested

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
AR	81	72	88	85
CO	2	1	7	5
IL	4	1	4	9
KS	23	11	15	16
LA	99	95	98	93
MS	93	76	91	91
MO	36	21	29	34
NE	13	2	2	9
NM	2	0	0	5
OK	12	7	15	14
SD	12	3	12	7
TX	61	58	65	73
ALL	36	28	33	37

These 12 States produced 99% of the 1996 sorghum crop.

Peanuts Percent Harvested

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
AL	74	66	40	NA
FL	78	61	59	NA
GA	65	50	43	NA
NC	10	6	18	NA
OK	12	2	19	NA
SC	45	34	41	NA
TX	27	19	11	NA
VA	27	9	50	NA
ALL	49	37	34	NA

These 8 States produced 99% of the 1996 peanut crop.

Rice Percent Harvested

	Oct 5 1997	Prev Week	Prev Year	5-Yr Avg
AR	77	58	85	78
CA	70	60	42	41
LA	96	92	98	95
MS	84	66	86	80
TX	93	87	100	96
ALL	82	69	81	77

These 5 States produced 96% of the 1996 rice crop.

Soybeans Crop Condition by Percent

	VP	P	F	G	EX
AL	5	16	48	29	2
AR	2	13	37	40	8
GA	15	24	40	20	1
IL	2	9	32	49	8
IN	2	6	33	49	10
IA	1	4	26	53	16
KS	0	2	20	61	17
KY	1	10	35	45	9
LA	4	18	27	46	5
MI	2	7	37	41	13
MN	1	5	26	56	12
MS	2	7	30	47	14
MO	2	15	37	40	6
NE	1	11	37	43	8
NC	5	14	21	53	7
OH	1	5	23	50	21
SC	3	15	37	40	5
SD	1	5	15	51	28
TN	1	5	26	50	18
ALL	2	8	29	49	12
Prev Wk	2	8	30	49	11
Prev Yr	2	6	31	48	11

Peanuts Crop Condition by Percent

	VP	P	F	G	EX
AL	24	29	38	8	1
FL	0	6	64	29	1
GA	4	18	47	29	2
NC	2	14	48	36	0
OK	0	2	35	60	3
SC	4	12	35	48	1
TX	9	16	35	32	8
VA	5	21	35	35	4
ALL	7	17	43	30	3
Prev Wk	5	21	42	27	5
Prev Yr	2	8	36	45	9

Crop Progress and Condition

Week Ending October 5, 1997

Corn Crop Condition by Percent

	VP	P	F	G	EX
CO	5	5	21	55	14
GA	1	8	39	46	6
IL	2	10	37	45	6
IN	2	8	35	48	7
IA	1	5	27	53	14
KS	1	4	18	61	16
KY	5	15	45	33	2
MI	2	9	36	42	11
MN	1	3	20	58	18
MO	9	19	40	29	3
NE	2	6	25	51	16
NC	3	13	32	49	3
OH	1	6	24	50	19
PA	13	29	33	23	2
SD	0	3	10	54	33
TX	0	0	3	66	31
WI	1	2	11	57	29
ALL	2	7	27	50	14
Prev Wk	2	7	26	51	14
Prev Yr	2	7	26	48	17

Cotton Crop Condition by Percent

	VP	P	F	G	EX
AL	6	11	69	13	1
AZ	0	6	20	50	24
AR	1	12	38	40	9
CA	0	0	15	60	25
GA	4	14	36	40	6
LA	4	13	45	33	5
MS	1	7	37	43	12
MO	0	20	36	43	1
NM	0	3	27	61	9
NC	3	11	38	44	4
OK	0	1	18	73	8
SC	2	11	31	48	8
TN	1	5	22	62	10
TX	1	9	28	51	11
ALL	2	9	32	47	10
Prev Wk	2	11	33	46	8
Prev Yr	2	12	29	44	13

VP - Very Poor
P - Poor
F - Fair
G - Good
EX - Excellent

National crop conditions for selected States are weighted based on 1996 planted acres.

Pasture and Range Crop Condition by Percent
Week Ending October 5, 1997

	VP	P	F	G	EX		VP	P	F	G	EX
AL	4	26	44	25	1	NH	0	6	40	54	0
AZ	8	9	27	45	11	NJ	0	0	60	40	0
AR	4	26	37	31	2	NM	1	7	26	60	6
CA	5	25	35	35	0	NY	0	7	14	75	4
CO	4	5	22	58	11	NC	4	11	35	46	4
CT	0	0	29	71	0	ND	13	36	34	17	0
DE	4	28	46	22	0	OH	2	9	34	46	9
FL	0	10	50	35	5	OK	3	10	30	49	8
GA	2	19	48	29	2	OR	4	5	46	34	11
ID	0	9	16	53	22	PA	5	20	35	40	0
IL	3	13	36	43	5	RI	0	0	20	53	27
IN	12	21	40	24	3	SC	5	30	43	21	1
IA	8	18	27	37	10	SD	1	2	22	58	17
KS	2	6	28	58	6	TN	3	13	37	42	5
KY	9	23	39	26	3	TX	6	22	43	26	3
LA	2	18	48	30	2	UT	0	3	7	71	19
ME	0	19	26	18	37	VT	0	0	55	37	8
MD	4	12	42	40	2	VA	12	32	45	11	0
MA	3	7	20	70	0	WA	2	18	38	41	1
MI	1	11	52	28	8	WV	3	10	30	52	5
MN	5	11	38	42	4	WI	0	2	25	59	14
MS	6	17	31	42	4	WY	2	2	11	69	16
MO	3	15	43	37	2	ALL	4	15	34	41	6
MT	7	14	37	37	5						
NE	6	17	32	42	3	Prev Wk	4	14	34	42	6
NV	0	0	10	77	13	Prev Yr	3	11	34	44	8

State Agricultural Summaries

These summaries, issued weekly through the summer growing season, provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service. The crop weather reports are also available on the Internet through the NASS Home Page on the World Wide Web at http://www.usda.gov/nass/ or from JAWF at http://www.usda.gov/oce/waob/jawf.

ALABAMA: Days suitable for fieldwork 5.8. Topsoil condition 5% very short, 31% short, 62% adequate, and 2% surplus. Corn harvested 91%, compared with 78% in 1996 and the 82% avg. Livestock condition 3% very poor 4% poor, 32% fair, 58% good, and 3% excellent. Wheat planted 5%, compared with 11% in 1996 and the 14% avg. Clear, dry weather prevailed in most areas as cotton producers prepared equipment for harvest.

ALASKA: CROPS ARE FINISHED FOR THE SEASON. NO NARRATIVE UNTIL MAY 1998.

ARIZONA: Unseasonably warm weather helped cotton harvest. Alfalfa harvest activity was 22% light, 29% moderate, and 38% active, with 11% not being harvested; condition was 6% poor, 13% fair, 53% good, and 28% excellent. Central growers shipped cantaloupe, honeydews, and carrots. Chile pepper and pistachio harvests continued in eastern areas. September rains improved grazing conditions. High elevation pastures were in mostly good condition, lower elevation pastures were fair to mostly good, and mid elevation pastures were fair to mostly good. Livestock condition was in fair to good condition. Soil moisture condition was short to adequate in most areas, and stock water was short to adequate, with insect damage being reported.

ARKANSAS: Days suitable for fieldwork 7. Soil moisture condition was 5% very short, 48% short, and 47% adequate. Weather was hot, humid, and dry. Main farming activities: Harvesting rice and soybeans and planting wheat and winter pastures. Other farm activities: Harvesting cotton and corn and completing hay harvests, as well as weaning calves and selling calves and cattle. Corn condition was 11% poor, 34% fair, 27% good, and 28% excellent. Alfalfa hay condition was 12% poor, 32% fair, 55% good, and 1% excellent. Other hay condition was 3% very poor, 25% poor, 38% fair, 33% good, and 1% excellent. Pasture feed condition was 4% very poor, 26% poor, 37% fair, 31% good, and 2% excellent.

CALIFORNIA: Field activities progressed normally in most areas, with rainfall causing slight delays in some regions. Field preparation for planting small grains and forage crops continued, while earlier seeded fields of oat hay and winter forage showed good growth. Cotton defoliation continued, with some reapplication necessary due to earlier rainfall. Cotton harvest was underway in all regions, delayed in the southern San Joaquin Valley, and allowed to dry some in the Imperial Valley after rains from Hurricane Nora. Rice harvest was in full swing and began to wind down in the Sacramento Valley. Dry bean harvest progressed normally, with little rain damage. Corn for grain and silage was harvested. Safflower and sorghum were also harvested. Sugar beet harvest was at its peak or winding down in most areas. Good yields were reported. Planting of next year's sugar beet crop was underway in the lower San Joaquin Valley. Alfalfa continued to be cut for hay or green chopped. In some areas, cut hay was damaged by rains from Hurricane Nora. Walnut and pistachio harvests continued. Nearly half the walnut crop has been harvested. Nearly 10% of the season's raisin grapes remained in the field on rolled trays, 5% on open trays. Wine grape harvesting continued. Table grape growers applied fungicides to control bunch rot. Growers were applying final irrigations to harvested vineyards. Harvest continued for persimmons, pomegranates, Asian pears, and plums. Apple harvest included the fuji, Granny Smith, red delicious, and golden delicious varieties. A light olive crop continued to be harvested. A few end-of-season Valencia oranges were harvested. Satsuma tangerines were harvested; quality was fair. Navel orange crop harvest began in a small way in Kern County, with larger and higher quality fruit than last year. Lettuce, cauliflower, and broccoli were harvested in Monterey County. Cauliflower, cucumber, and broccoli crops were progressing well in the coastal areas of the San Joaquin Valley. Sweet corn and broccoli were treated to control worms in Fresno County. Spinach was planted in Tulare County. Pumpkins were harvested in the Sacramento and San Joaquin Valleys. Honeydew, cantaloup, and watermelon harvests were winding down in the central San Joaquin Valley. Imperial Valley cantaloup and honeydew melon harvest began. Potato harvest progressed in Siskiyou County. Other crops harvested were onions, garlic, radishes, vineseed, eggplant, squash, okra, and green beans. Pasture and rangeland were very dry and in poor condition, despite cooler temperatures. Supplemental feeding was widespread. Livestock remained in generally good condition throughout the State. Milk production increased with the milder temperatures

COLORADO: Days suitable for fieldwork 6.3. Topsoil condition wsa 11% very short, 31% short, 55% adequate, and 3% surplus. Subsoil 7% very short, 24% short, 64% adequate, and 5% surplus. Dry, warm week across the State was favorable for fall harvest activities. Corn harvest was underway, while sorghum harvest has been delayed 2 to 3 weeks in southern areas. Spring wheat was 96% harvested, compared with 100% in 1996 and the 96% avg. Summer potatoes were 88% harvested, compared with 89% in 1996 and the 91% avg. Dry onions were 93% harvested, compared with 97% in 1996 and the 88% avg. Fall potatoes were 83% harvested, compared with 75% in 1996 and the 72% avg. Sugar beets were 9% harvested, compared with 17% in 1996 and the 5% avg.; condition was 4% poor, 12% fair, 62% good, and 22% excellent. Dry beans were 87% cut, compared with 98% in 1996 and the 88% avg.; 77% threshed, compared with 89% in 1996 and the 75% avg. Alfalfa was 81% harvested (3rd cutting), compared with 83% in 1996 and the 80% avg.; 38% (4th cutting), compared with 17% in 1996 and the 20% avg.; condition was 2% very poor, 5% poor, 26% fair, 54% good, and 13% excellent.

DELAWARE: Days suitable for fieldwork 6.5. Topsoil condition was 2% very short, 47% short, and 51% adequate. Subsoil condition was 3% very short, 33% short, and 64% adequate. Corn condition was 12% very poor, 21% poor, 20% fair, 44% good, and 3% excellent. Field corn development was 80% was mature, compared with 80% in 1996 and the 92% avg.; 35% was harvested for grain, compared with 40% in 1996 and the 47% avg.; 83% was harvested for silage, compared with 85% in 1996 and the 94% avg. Soybean condition was 6% very poor, 24% poor, 28% fair, and 42% good; 63% were turned, compared with 55% in 1996 and the 68% avg.; 41% were shedding leaves, compared with 38% in 1996 and the 46% avg. Sorghum condition was 16% poor, 22% fair, and 62% good; 35% was mature, compared with 69% in 1996 and the 51% avg.; 6% was harvested, compared with 7% in 1996 and the 5% avg. Lima beans were 91% harvested, compared with 89% in 1996 and the 87% avg. Apples were 90% harvested, compared with 79% in 1996 and the 74% avg. Hay supplies were 22% very short, 33% short, and 45% adequate. Clover and other hays were 73% harvested (4th cutting), compared with 58% in 1996 and the 58% avg. Alfalfa was 74% harvested (4th cutting), compared with 73% in 1996, 78% avg. Pasture feed condition was 4% very poor, 28% poor, 46% fair, and 22% good. Activities: Corn harvesting was active and vegetable harvest was winding down.

FLORIDA: Topsoil condition was mostly short to adequate in the Panhandle and northern Peninsula. In the central and southern Peninsula, moisture was mostly adequate. Sugarcane growth was normal. Tobacco markets are scheduled to close next week. Starting to defoliate cotton. Soybean harvest was starting. The dry

weather was excellent for haying. Peanut progress was 78% harvested; with condition poor 6%, fair 64%, good 29%, and excellent 1%. Growers replanted some vegetable acreage damaged by recent heavy rains and plowed under some watermelons in the Palmetto-Ruskin area. Sweet corn, radish, and pickle harvesting were underway in the Zellwood area. Cutting of limited eggplant acreage was underway in the Palmetto-Ruskin region. Squash harvesting started in the southwest. Citrus groves, trees, and fruit condition were very good to excellent. Producers irrigated some since crops had received very little rain. New growth was mostly on young trees. Color break was on some early bloom trees. Many types of early fruit were being shipped from several packing houses, with few processors open and some packing house eliminations destroyed in pastures. Caretakers were cutting cover crops, spraying, fertilizing, and liming, and planting a few resets. Pasture feed condition was poor 10%, fair 50%, good 35%, and excellent 5%. Cattle fair 35%, good 60%, and excellent 5%. Grass growth was seasonally slowing in the north and central areas. Ranchers in the north were preparing to plant small grains for winter pasture. Recent rains reduced drought severity, but ponds were still at low levels. In areas where pastures were most hurt by last month's dry spell, cattle have lost weight. Many southeastern pastures have standing water from last week's rain. Heavy (10 in.) rain filled some ponds. Fall calving season was going strong.

GEORGIA: Days suitable for fieldwork 5.5. Soil moisture condition was 1% very short, 16% short, 78% adequate, and 5% surplus. Hay condition was 3% very poor, 19% poor, 48% fair, 29% good, and 1% excellent. Peanut harvest was 65% threshed, compared with 43% in 1996 and the 56% avg. Rye progress was 19% planted, compared with 17% in 1996 and the 22% avg. Sorghum condition was 5% very poor, 19% poor, 47% fair, and 29% good; 44% was harvested for grain, with 40% in 1996 and the 58% avg. Other small grains were 7% planted, compared with 8% in 1996 and the 13% avg. Apple condition was 4% poor, 10% fair, 80% good, and 6% excellent; 71% were harvested, compared with 84% in 1996 and the 78% avg. Pecan harvest was 3% very poor, 20% poor, 41% fair, 34% good, and 2% excellent; 3% was harvested, compared with 1% in 1996 and the 2% avg. September 24 through 27 rains brought an end to the Statewide drought. Many crops responded with moderate improvement in the condition ratings, while others were steady or down slightly. Soybeans have been the crop most affected by the drought, condition ratings improved only slightly. Activities: Preparing land for fall planting, cutting and baling hay, over-seeding and fertilizing pastures, defoliating cotton, harvesting vegetables, harvesting fall row crops, and soil testing.

HAWAII: The weather was fair for agriculture, with partly cloudy, isolated showers. Increased weekend showers helped crops and pastures. Insect activity was moderate to heavy, and being closely monitored. Banana harvesting had a steady, seasonal decline in some areas. Crop condition was mostly good. Papaya harvesting was active,with crop condition varied fair to good. Head cabbage slowed growth due to seasonal change. Crop condition was mostly good. Heavy irrigation on Chinese cabbage, and disease was causing some loss yield. Cucumber harvesting very active in most areas. Peak production on Oahu. Dry onion harvesting decreased, and plantings were also down as winter approaches. Papaya harvesting was active. Crop condition varies poor to good. Disease is a problem in some areas.

IDAHO: Days suitable for fieldwork 6.0. Topsoil 3% surplus, 85% adequate, and 12% short. Excellent fall weather last week allowed farmers to make rapid progress in the potato harvest and winter wheat seeding. Winter wheat condition was 7% excellent, 83% good, and 10% fair. Potatoes vines dying/killed was 98%, compared with 99% in 1996 and the 99% avg.; harvested was 46%,compared with 48% in 1996 and the 53% avg. Potato condition was 12% excellent was 61% good, 22% fair, and 5% poor. Alfalfa hay harvested (3rd cutting) 84%, compared with 86% in 1996 and the 85% avg. Oats harvested for grain 95%, compared with 94% in 1996 and the 95% avg. Lentils harvested were 99%, compared with 99% in 1996 and the 94% avg. Dry beans harvested were 89%, compared with 92% in 1996 and the 84% avg. Apples harvested were 31%, compared with 37% in 1996 and the 45% avg. Onions harvested were 81%, compared with 88% in 1996 and the 82% avg. Sugar beets harvested were 14%, compared with 12% in 1996 and the 16% avg. Sweet corn harvested was 99%, compared with 99% in 1996 and the 97% avg. Corn harvested for silage was 77%, compared with 82% in 1996 and the 74% avg. Corn harvested for grain was 8%, compared with 6% in 1996 and the 9% avg. Irrigation water supply was 50% excellent, 49% good, and 1% fair. Activities: Harvesting, preparing seed beds, irrigating, seeding winter grains, and moving livestock down from the summer range.

ILLINOIS: Days suitable for fieldwork 6.8. Topsoil condition was 4% very short, 35% short, 60% adequate, and 1% surplus. Soybeans were harvested at a record pace last week as warm, windy conditions rapidly pushed the soybean crop toward maturity. The moisture level in many areas was reported to be very low (10 percent), with green stems still visible in the standing crop. High winds experienced last week helped to dry the corn crop, but there were several reports of stalks being blown down and ears dropping off, where borer damage has occurred. This has lead to concerns regarding the amount of grain that will be left in the field when corn harvest picks up in the next 7 to 10 days. As the beans are being harvested, the winter wheat crop is being sown, but rainfall is needed before good emergence will occur. Other activities: Harvesting the final cutting of hay, wrapping up silage chopping, seeding rye, and spreading fertilizer. Soybeans turning yellow were 97%, compared with 89% in 1996 and the 96% avg. Sorghum coloring was 96%, compared with 95% in 1996 and the 92% avg.; condition was 3% very poor, 14% poor, 36% fair, and 47% good.

INDIANA: Days suitable for fieldwork 6.7. Topsoil condition was 16% very short, 33% short, 50% adequate, and 1% surplus. Subsoil condition was 15% very short, 30% short, 54% adequate, and 1% surplus. Dry sunny conditions allowed Hoosier farmers to harvest 21% of the soybean acreage last week. Heavy winds reportedly caused lodging in some corn fields. Range and pasture feed condition was 12% very poor, 21% poor, 40% fair, 24% good, and 3% excellent. Tobacco was 75% harvested, compared with 91% in 1996 and the 94% avg. Activities: Harvesting soybeans and corn, preparing wheat seedbed and planting, tilling harvested soybean acreage, and caring for livestock.

IOWA: Days suitable for fieldwork 6.9. Topsoil conditon was very short 8%, short 33%, adequate 58%, and surplus 1%. Subsoil condition was very short 12%, short 34%, adequate 53%, and surplus 1%. Soybean harvest was progressing well and wrapping up in many parts of the State. Some producers are hoping for a frost to take moisture out of bean stems, which are green and tough. Overall it was an excellent drying week. However, strong winds on the 29th really tested corn fields for lodging and ear droppage. According to reporters, corn borer damage was prevalent in some fields and severe. Corn and soybean conditions remained unchanged. Range and pasture conditions improved very slightly. Corn acreage mature 96%, compared with 82% in 1996 and the 84% avg.; harvested 8%, compared wit;h 5% 1996 and the 10% avg. Soybean acreage had leaves dropping 99%, compared with 81% in 1996 and the 89% avg.; harvested 56%, compared with 19% in 1996 and the 28% avg. Alfalfa hay (3rd harvest) was 96% harvested, compared with 100% in 1996 and the 96% avg. Corn condition was 2% very poor, 5% poor, 27% fair, 53% good, and 14% excellent. Soybean condition was 1% very poor, 4% poor, 26% fair, 53% good, and 16% excellent. Livestock was in good condition. Pastures were still short in several areas. Corn combined just to feed hogs. Some movement of feeder calves occurred. Pasture feed condition was 8% very poor, 18% poor, 27% fair, 37% good, and 10% excellent.

KANSAS: Days suitable for fieldwork 6.1. Topsoil condition was 1% very short, 10% short, 69% adequate, and 20% surplus. Subsoil condition was 2% very short, 17% short, 77% adequate, and 4% surplus. Wheat seedings and fall harvest made good progress last week. Wheat progress is slightly behind the 5-year average, while fall harvest is ahead. Wheat condition was 1% poor, 20% fair, 59% good, and 20% excellent. Sorghum condition was 3% poor, 22% fair, 62% good, and 13% excellent. Sunflowers condition was 1% very

poor, 7% poor, 28% fair, 58% good, and 6% excellent; development was mature 83%; and harvested 26%. Stock water condition was 3% very short, 9% short, 86% adequate, and 2% surplus. Major field activities: Planting wheat and fall harvest. Livestock producers are fall calving, weaning, and moving some cattle off pastures to crop residue.

KENTUCKY: Days suitable for fieldwork 5.9. Topsoil condition was 18% very short, 48% short, 33% adequate, and 1% surplus. Subsoil condition was 19% very short, 45% short, 35% adequate, and 1% surplus. Statewide rainfall was limited. Burley tobacco cut was 82%, compared with 93% in 1996 and the 95% avg. Dark tobacco cut was 87%, compared with 94%in 1996 and the 97% avg. Housed tobacco 1% very poor, 6% poor, 29% fair, 55% good, and 9% excellent. Corn was about 33 percent harvested, well behind last year and the average. Soybean was just beginning statewide, slightly ahead of last year and the average.

LOUISIANA: Days suitable for fieldwork 6.8. Soil moisture 19% very short, 39% short, 42% adequate. Cotton harvest made excellent progress with the dry, cooler weather. Hay 99% (2nd cutting) harvested, 98% 1996, 91% avg. Harvest was active. More hay will be harvested if rain is received amd warm weather continues. Pecans 9% very poor, 12% poor, 41% fair, 36% good, 2% excellent; 2% harvested, 2% 1996, 2% avg. Southern growers prepared to harvest a few fields of second-crop rice. Soybeans turning color, 92% 1996, 89% avg. Late soybean harvest was just getting underway. Sugarcane 4% poor, 24% fair, 53% good, 19% excellent; 99% planted, 75% 1996, 85% avg.; 4% harvested, 0% 1996, 2% avg. Planting was ahead of schedule, at virtually complete due to dry weather. Newly planted land continued to need moisture. Sweet potatoes 1% very poor, 7% poor, 36% fair, 56% good; 50% harvested, 54% 1996, 58% avg. Wheat was 20% planted, 6% 1996, 4% avg.; 0% emerged, 2% 1996, 1% avg. Planting made good progress, inspite of being halted late in the week because fields were too dry. Livestock 7% poor, 37% fair, 50% good, 6% excellent. Vegetables 5% very poor, 17% poor, 49% fair, 28% good, 1% excellent. Ryegrass planting was halted due to lack of moisture.

MARYLAND: Days suitable for fieldwork 6.4. Topsoil condition was 14% very short, 55% short, 31% adequate. Subsoil condition was 19% very short, 38% short, 43% adequate. Corn was 41% very poor, 14% poor, 15% fair, 25% good, 5% excellent. Field corn 92% mature, 90% 1996, 89% avg.; 24% harvested for grain, 36% 1996, 41% avg.; 86% harvested for silage, 81% 1996, 79% avg. Soybeans 9% very poor, 16% poor, 33% fair, 35% good, 7% excellent; 67% turned, 72% 1996, 78% avg.; 48% shedding leaves, 43% 1996, 52% avg.; 10% harvested, 3% 1996, 5% avg. Sorghum 2% very poor, 3% poor, 43% fair, 47% good, 5% excellent; 62% mature, 82% 1996, 75% avg.; 15% harvested, 14% 1996, 16% avg. Lima beans 80% harvested, 74% 1996, 82% avg. Apples 76% harvested, 46% 1996, 57% avg. Hay supplies 18% very short, 27% short, 54% adequate, 1% surplus. Alfalfa hay 80% harvested (4th cutting), 74% 1996, 82% avg.; 7% harvested (5th cutting), 6% 1996, 19% avg. Clover and other hays 75% harvested (4th cutting), 46% 1996, 44% avg. Activities: Corn harvesting was active and vegetable harvest neared completion.

MICHIGAN: Days suitable for fieldwork 6.5. Topsoil 11% short, 83% adequate, 6% surplus. Subsoil 11% short, 82% adequate, 7% surplus. Above normal temperatures benefitted unharvested crops. Very little precipitation occurred throughout the State. All hay 3rd cutting harvested 93% 1997, 85% 1996, 83% avg.; 4th cutting harvested 42% 1997, 25% 1996, 30% avg.; 3% very poor, 8% poor, 46% fair, 34% good, 9% excellent. Corn silage, harvested 53% 1997, 52% 1996, 59% avg. Dry beans mature 95% 1997, 82% 1996, 92% avg.; harvested 85% 1997, 36% 1996, 65% avg.; 6% very poor, 12% poor, 33 fair, 38% good and 11% excellent. Pasture feed 1% very poor, 11% poor, 52% fair, 28% good, 8% excellent.

MINNESOTA: Days suitable for fieldwork 6.4. Topsoil 2% very short, 11% short, 86% adequate, 1% surplus. Corn 92% mature, 81% 1996, 68% avg.; 6% harvested, 6% 1996, 6% avg.; 90% silage cut, 83% 1996, 64% avg.; 25% moisture content, 29% 1996, 29% avg. Soybeans 99% shedding leaves, 97% 1996, 90% avg.; 95% mature, 77% 1996, 69% avg.; 69% harvested, 18% 1996, 20% avg.; 11% moisture content, 14% 1996, 14% avg. Sunflowers 9% harvested, 26% 1996, 21% avg. Potatoes 77% harvested, 60% 1996, 63% avg. Flax 66% harvested, 77% 1996, 69% avg. Dry beans 91% harvested, 85% 1996, 72% avg. Stubble plowed 79%, 71% 1996, 68% avg. Sugar beets 10% harvested, 39% 1996, 28% avg. Pasture feed 5% very poor, 11% poor, 38% fair, 42% good, 4% excellent. Corn 1% very poor, 3% poor, 20% fair, 58% good, 18% excellent. Soybeans 1% very poor, 5% poor, 26% fair, 56% good, 12% excellent.

MISSISSIPPI: Days suitable for fieldwork 6.8. Soil moisture 21% very short, 26% short, 53% adequate. Corn 96% grain harvested, 93% 1996, 85% avg. Soybeans 100% setting pods, 100% 1996, 100% avg.; 90% turning color, 92% 1996, 88% avg.; 77% shedding leaves, 71% 1996, 68% avg.; 47% harvested, 31% 1996, 27% avg.; 2% very poor, 7% poor, 30% fair, 47% good, 14% excellent. Sweet potatoes 40% harvested, 62% 1996; 63% avg.; 18% poor, 34% fair, 47% good, 1% excellent. Hay (warm season) 100% harvested, 100% 1996. Cattle 2% very poor, 5% poor, 18% fair, 60% good, 15% excellent. Pasture feed 6% very poor, 17% poor, 31% fair, 42% good, 4% excellent. Activities: Main activities: Harvesting corn, cotton, rice, soybeans, planting wheat.

MISSOURI: Days suitable for fieldwork 6.8. Topsoil 6% very short, 40% short, 54% adequate. Warm, sunny weather was excellent for row crop harvesting. Soybean harvest was the most advanced since 1987. Soybean harvesting was 10% in the southwestern and southeastern districts to about 48% in the northeastern district. Corn harvest is most advanced for this date since 1991; harvest was complete in the Bootheel, while the northwestern and northeastern districts were least advanced with 23%. Sorghum was most advanced in the southwestern district at 99% mature and 58% harvested, while the central district was least advanced at 62% mature and 10% harvested. Pasture feed condition was 3% very poor, 15% poor, 43% fair, 37% good, and 2% excellent.

MONTANA: Days suitable for fieldwork 6.9. Topsoil was 20% very short, 49% short, 31% adequate. Subsoil 10% very short, 48% short, 42% adequate. Harvest of small grains was virtually complete. Seeding of winter wheat in some areas was delayed due to dry conditions. Spring wheat was harvested 99%, 100% 1996, 92% avg. Barley harvested 99%, 100% 1996, 93% avg. Oats harvested 98%, 99% 1996, 93% avg. Corn for silage harvested 91%, 85% 1996, 87% avg. Dry beans harvested 96%, 92% 1996, 89% avg. Potatoes harvested 35%, 33% 1996, 39% avg. Sugar beets harvested 17%, 23% 1996, 17% avg. Alfalfa hay harvest (2nd cutting) 97% complete, 100% 1996, 97% avg.; harvest (3rd cutting) of hay almost complete in some areas. Cattle and calves moved from summer rangest 31%, 34% 1996, 35% avg. Sheep and lambs moved from summer ranges 41%, 45% 1996, 39% avg. Livestock good to excellent.

NEBRASKA: Days suitable for fieldwork 6.7. Subsoil 6% very short, 34% short, 60% adequate. Topsoil 4% very short, 27% short, 69% adequate. Above normal temperatures, dry conditions last week caused fall crops to dry down rapidly, promoted active harvest progress. Grasshopper population continued to be a concern in many areas. Corn 2% very poor, 6% poor, 25% fair, 51% good, 16% excellent; irrigation corn 74% good to excellent, dryland corn 52% good to excellent; 86% mature, 84% 1996, 84% avg.; 11% harvested, 6% 1996, 10% avg.; early crop harvest moisture content varied from 15-26%; stalk breakage, lodging due to corn borer damage was reported in east central part of the State. Soybean 1% very poor, 11% poor, 37% fair, 43% good, 8% excellent; 98% dropped leaves, 89% 1996 93% avg.; 30% harvested, 18% 1996, 32% avg. Some reports indicated that moisture content of harvested beans was under 10%. Sorghum 3% very poor, 11% poor, 32% fair, 42% good, 12% excellent; 87% mature, 68% 1996, 68% avg.; 13% harvested, 2% 1996, 9% avg. Dry bean 86% harvested, 88% 1996. Alfalfa 4% very poor, 16% poor, 36% fair, 40% good, 4%excellent; 59% 4th cutting, 59% 1996 Winter wheat 93% planted, 83% 1996, 91% avg.; 68% emerged, 48% 1996, 65% avg. Pasture feed 6%

very poor, 17% poor, 32% fair, 42% good, 3% excellent. Some supplemental feeding; cattle will be moved to stalks as corn harvest progresses; weaning, working calves.

NEVADA: Irrigation season coming to an end with water supplies adequate all year. Pasture, range forage supplies declining seasonally. Field preparations, seeding of winter grains, new alfalfa fields continued. Alfalfa 3rd cutting very nearly complete, 4th cutting getting underway central, 5th cutting underway south. Corn harvest well along. Onion, potato harvests continue. Calves being weaned, livestock movement to fall pastures underway. Main farm, ranch activities: Haying, onion harvest, potato harvest, weaning calves.

NEW ENGLAND: Days suitable for fieldwork 5.6. Topsoil 1% very short, 11% short, 76% adequate, 12% surplus. Subsoil 1% very short, 13% short, 81% adequate, 5% surplus. Pasture feed 6% poor, 40% fair, 42% good, 12% excellent. Maine potatoes 65% harvested, 70% 1996, 70% avg.; condition good. Massachusetts potatoes 85% harvested, 80% 1996, 85% avg.; condition good. Rhode Island potatoes 90% harvested, 65% 1996, 80% avg.; good to excellent. Oats in Maine 85% harvested, 95% 1996, 90% avg.; condition good. Barley in Maine 85% harvested, 95% 1996; condition good. Field corn 50% harvested, 50% 1996, 55% avg.; condition good to fair. Sweet corn 99% harvested, 99% 1996, 99% avg.; condition good. Hay 1st cut 99% harvested, 100% 1996, 100% avg.; condition good to fair; 2nd cut 85% harvested, 90% 1996, 95% avg.; condition good to fair; 3rd cut 85% harvested, 65% 1996, 75% avg.; condition good. Apples 70% harvested, 65% 1996, 65% avg.; fruit size avg to above avg.; condition good to excellent. Peaches 99% harvested; 100% 1996, fruit size avg to above avg.; condition good to excellent. Pears 85% harvested, 70% 1996; fruit size avg.; condition good. Cranberries 25% harvested, 35% 1996; fruit size avg to above avg.; condition good to excellent. Unseasonably warm weather toward weekend. Field corn harvest in full swing. Major farm activities: Harvesting field corn, potatoes, pumpkins, winter squash, oats, barley, cranberries, apples, pears; spreading manure; disking down harvested fields, planting cover crops; cutting hay; spreading lime, fertilizer.

NEW JERSEY: Days suitable for fieldwork 7. Topsoil short to adequate. Main farming activities: Harvesting vegetables, planting cover crops and implementing pest control measures. Harvesting of summer vegetables (tomatoes, eggplant, green beans, peppers, squash, cucumbers, potatoes, snap beans) is nearly complete. Harvesting of fall items (spinach, cabbage, parsley, lettuce, sweet potatoes, endive, escarole, Indian corn, beets, turnips, pumpkins) is increasing. Soybeans are dropping leaves. Harvest of corn for grain, silage continues. Pasture conditions fair to good. Good, increasing volume of apples. Cranberry harvest has started.

NEW MEXICO: Days suitable for fieldwork 6.8. Topsoil 1% very short, 29% short, 66% adequate, 4% surplus. Hay harvest is winding down across State. Alfalfa 5th cutting reached 79% complete, 6th cutting 17% completed; 15% poor, 31% fair, 51% good, 3% excellent. Cotton harvest was getting underway 3% harvested, 9% 1996, 3% avg.; 84% bolls open, 91% 1996, 86% avg.; 3% poor, 27% fair, 61% good, 9% excellent. Sorghum harvest began; 2% harvested, 0% 1996, 5% avg.; 14% mature, 35% 1996, 31% avg.; 94% colored, 75% 1996, 85% avg.; 16% poor, 38% fair, 46% good. Green chile harvest was coming to a close with 92% harvested, while red chile harvest reached 9% complete; 1% poor, 28% fair, 61% good, 10% excellent. Corn 14% fair, 78% good, 8% excellent; 91% mature, 99% 1996; 17% of grain crop harvested, 88% of silage in. Wheat producers continued planting; 90% complete, 94% 1996, 95% avg.; 77% emerged, 84% 1996, 54% avg. Apples mostly good with 75% of the crop harvested. Pecan crop continues to look good; 24% fair, 46% good, 30% excellent. Fall onion planting progressed to 47% complete by weekend. Lettuce harvest should begin within the next week; 10% fair, 63% good, 27% excellent. Cattle, sheep mostly good condition. Range, pasture feed 1% very poor, 7% poor, 26% fair, 60% good, 6% excellent.

NEW YORK: Days suitable for fieldwork 5.2. Soil moisture 9% short, 59% adequate, 32% short. Pasture feed 7% poor, 14% fair, 75% good, 4% excellent. Corn 22% fair, 78% good. Silage 37% harvested, 44% 1996, 45% avg. Grain corn harvest just beginning. Hay 11% fair, 89% good. Alfalfa 3rd cutting 89% finished, 85% 1996, 86% avg. Dry bean harvest 60% complete. Upstate potatoes 70% dug. Apple harvest continued. Peach harvest complete. Niagara grape harvest underway. Vegetable harvest winding down. Killing frost hit many areas. Late cabbage, pumpkins, squash harvest still active.

NORTH CAROLINA: Days suitable for fieldwork 5.8. Soil moisture 1% very short, 14% short, 78% adequate, 7% surplus. Rainfall down, enough help several crop conditions improve. Rains continue to give farmers hope that yield prospects for cotton, peanuts, soybeans will improve. Christmas tree growers are beginning to tag trees for the upcoming harvest. Activities for the week included: Harvesting, barning, marketing of flue-cured tobacco; harvesting burley tobacco, apples, sweet potatoes, cotton, soybeans, corn; cutting silage; cutting hay; scouting, spraying for insects on cotton, soybeans; defoliating cotton; planting, preparing land for planting of small grains; planting cover crops; maintaining pastures; tending livestock; repairing equipment.

NORTH DAKOTA: Days suitable for fieldwork 7. Topsoil 25% very short, 41% short, 32% adequate, 2% surplus. Subsoil 12% very short, 40% short, 46% adequate, 2% surplus. Favorable weather during the week helped producers continue with the late season crop harvest. Durum wheat 99% combined; 87% 1996, 92% avg. Late season crop harvest continued at a pace well ahead of average, except Sugar beets. Canola 97% combined; 88% 1996; corn for grain 92% ripe and beyond, 12% harvested; 90%, 4% 1996, 67%, 5% avg.; corn for silage 89% chopped; 81% 1996, 79% avg.; dry edible beans 97% cut, 89% combined; 85%, 78% 1996; 82%, 68%, avg.; flaxseed 95% combined; 77% 1996; 72% avg.; potatoes 84% dug; 72% 1996; 79% avg.; soybeans 85% harvested; 40% 1996, 41% avg.; sugar beets 11% lifted; 41% 1996, 29% avg.; sunflower 92% bracts turned brown and beyond, 21% harvested; 93%, 5% 1996, 84%, 5% avg. Corn for grain, sugar beet conditions remained relatively unchanged, while sunflowers declined slightly from last week. Emerged crop condition: corn for grain 4% poor, 15% fair, 61% good, 20% excellent; sugarbeets 5% very poor, 7% poor, 17% fair, 58% good, 13% excellent; sunflower 2% very poor, 6% poor, 28% fair, 51% good, 13% excellent. Pasture feed 13% very poor, 36% poor, 34% fair, 17% good. Reports of increased cattle sales due to dry pasture conditions were received from the northwest district. Besides combining, hay hauling and fall tillage were major activities

OHIO: Days suitable for fieldwork was 6.4 days. Topsoil 2% very short, 24% short, 70% adequate, 4% surplus. Corn dented 4 days behind avg.; mature increased 15 points from last week; 1% harvested for grain; 37% harvested for silage, 42% 1996, 69% avg. Soybeans dropping leaves 4 points behind the avg.; 47% matured.; harvested 2 days behind avg. Winter wheat planting increased 17 points; 1% emerged. Alfalfa hay 97% 3rd cutting, 95% 1996, 99% avg. Other hay 73% 3rd cutting, 81% 1996, 86% avg. Tobacco 82% harvested. Summer apples harvested virtually complete. Fall, winter apples 35% harvested. Potatoes 57% harvested, 64% 1996, 75% avg. Processing tomatoes 75% harvested, 92% 1996, 92% avg. Grapes 53% harvested. Activities: Fourth cutting of alfalfa hay; baling hay; fall plowing; soil testing; applying lime, fertilizer, manure; tiling; planting barley; equipment maintenance, preparation; last minute repairs to grain bins; filling silos, grain bins; harvesting pumpkins, sweet corn, garden vegetables; cider processing; firewood cutting; preparing for county fairs. In Ashtabula, grape growers are harvesting Niagara grapes. Reported weed pressures: Ragweed, wild carrot, velvet leaf. One reporter mentioned some soybean harvesting was delayed due to considerable numbers of green weeds. Reported insects: European corn borer in corn, Potato leafhopper in alfalfa. Reported diseases: White mold in soybeans; late tomato blight; blight on pumpkins, squash. Hay 1% very poor, 7% poor, 35% fair, 48% good, 9% excellent

OKLAHOMA: Days suitable for fieldwork 6.4. Topsoil 9% very short, 25% short, 64% adequate, 2% surplus. Subsoil 9% very short, 11% short, 79% adequate, 1% surplus. Warm, dry weather accelerated wheat seeding and allowed row crop harvest to progress. Oats 25% planted, 36% 1996, 37% avg. Corn 100% mature, 84% 1996, 94% avg.; 84% harvested, 73% 1996, 80% avg. Soybeans 72% mature, 73% 1996, 61% avg.; 20% harvested, 22% 1996, 21% avg. Peanuts 50% mature, 60% 1996, 57% avg.; 1% combined, 5% 1996. Alfalfa hay 89% 4th cutting, 88% 1996, 92% avg.; 25% 5th cutting, 21% 1996, 32% avg. All other hay 65% 2nd cutting, 100% 1996, 99% avg. Livestock 3% poor, 16% fair, 74% good, 7% excellent. Feeder steer prices up $2.00.

OREGON: Days suitable for fieldwork 6.5. Topsoil 2% very short, 21% short, 72% adequate, surplus 5%. Subsoil 1% very short, 22% short, 76% adequate, 1% surplus. Barley planted 22%, 8% 1996, 21% avg. Winter wheat 100% good.; planted 50%, 31% 1996, 40% avg.; emerged 21%, 9% 1996, 14% avg. Activities: Weather conditions slowed field activity on Westside. Willamette Valley reported liming and fertilizing operations completed in some areas, while field corn for silage harvest continued. Silage chopping underway on East side as well. Most hay cut, poor drying conditions slowed completion. Seeding of fall grains continued, with good emergence reported in the Mid-Columbia area. Nursery & greenhouses continued fall activities in between the heavy fall rains. Westside slowing down on vegetable harvest. Onion harvest ongoing in Willamette Valley & sweet corn harvest for processing continued. U-pick & roadside stands still offering sweet corn, tomatoes, zucchini & some cucumbers in Rogue River Valley. Potato & onion harvests continued on East side. Hazelnuts harvest underway in the Willamette Valley. In the Willamette Valley & Rogue River Valley pear & apple harvests winding down & grape harvest continued. On the south coast cranberry harvest continued. Livestock continued to be rated good. Willamette Valley pastures putting on good growth. Pastures in southwestern areas started greening up under recent rains, some hay being fed. East side range & pasture continued dry, despite some light rainfall. Cattle being gathered off Forest Service allotments in Northeast.

PENNSYLVANIA: Days suitable for fieldwork 4.7. Soil moisture 3% very short, 35% short, 53% adequate, 9% surplus. Fair week for fieldwork. Ensilage corn harvest 60% complete, 63% 1996, 59% avg. Soybean 8% very poor, 21% poor, 42% fair, 27% good, 2% excellent. Wheat planted 45% complete, 45% 1996, 46% avg.; emerged 20% complete, 22% 1996, 22% avg. Barley planted 60% complete, 54% 1996, 63% avg.; emerged 35% complete, 36% 1996, 36% avg. Potato harvest 65% complete, 64% 1996, 68% avg. Alfalfa 3rd cutting 91% complete, 91% 1996, 87% avg.; 4th cutting 63% complete, 53% 1996, 53% avg. Quality of hay made 2% very poor, 15% poor, 28% fair, 35% good, 20% excellent. Apple harvest 55% complete, 59% 1996, 62% avg. Grape harvest 35% complete, 67% 1996, 60% avg. Fall plowing 65% complete, 55% 1996, 59% avg. Activities: harvesting fruits and vegetables; making hay and haylage; filling silos; seeding barley and wheat; plowing fields; fixing fences; hauling manure; caring for livestock.

SOUTH CAROLINA: Days suitable for fieldwork 6.2 . Soil moisture 3% very short, 18% short, 75% adequate, 4% surplus. Apples 77% harvested, 74% 1996, 79% avg.; 19% fair, 81% good. Barley 12% planted, 15% 1996, 5% avg.; 8% emerged, 11% 1996, 1% avg.; 11% fair, 89% good. Corn 97% harvested, 96% 1996, 92% avg.; 3% poor, 16% fair, 54% good, 27% excellent. Cotton 77% bolls opened, 89% 1996, 87% avg; 8% harvested, 32% 1996, 17% avg.; 2% very poor, 11% poor, 31% fair, 48% good, 8% excellent. Oats 24% planted 15% 1996, 12% avg.; 16% emerged, 8% 1996, 4% avg.; 2% poor, 25% fair, 53% good, 20% excellent. Peanuts 45% harvested 41% 1996, 41% avg.; 4% very poor, 12% poor, 35% fair, 48% good, 1% excellent. Pecans 79% fair, 21% good. Rye 26% planted, 21 % 1996, 17% avg.; 12% emerged, 15% 1996, 7% avg.; 49% fair, 42% good, 9% excellent. Sorghum 77% harvested, 64% 1996, 52% avg.; 3% poor, 39% fair, 58 % good. Soybeans 99% pods set, 99% 1996, 100% avg.; 43% leaves turning color, 42% 1996, 44% avg.; 24% leaves dropped, 14% 1996, 16% avg.; 16% mature, 10% 1996, 8% avg; 2% harvested 2% 1996, 1% avg.; 3% very poor, 15% poor, 37% fair, 40% good, 5% excellent. Sweet potatoes 27% harvested, 28% 1996, 39% avg.; 1% very poor, 4% poor, 32% fair, 62% good, 1% excellent. Tobacco 100% harvested, 100% 1996, 99% avg.; 94% stalks destroyed, 73% 1996, 82% avg.; 1% poor, 17% fair, 64% good, 18% excellent. Winter Grazings 42% planted, 37% 1996, 39% avg.; 30% emerged, 27% 1996, 24% avg.; 2% very poor, 9% poor, 28% fair, 55% good, 6% excellent. Winter wheat 15% planted, 8% 1996, 3% avg.; 3% emerged, 2% 1996, 1% avg.; 1% very poor, 35% poor, 56% fair, 8% good.

SOUTH DAKOTA: Days suitable for fieldwork 6.4. Topsoil 6% very short, 21% short, 71% adequate, 2% surplus. Subsoil 2% very short, 16% short, 77% adequate, 5% surplus. Stock water 3% short, 91% adequate, 6% surplus. Sorghum 1% poor, 9% fair, 68% good, 22% excellent. Sunflower 2% poor, 11% fair, 61% good, 26% excellent. Winter rye 3% poor, 16% fair, 58% good, 23% excellent. Winter wheat 1% poor, 12% fair, 63% good, 24% excellent. Livestock 8% fair, 66% good, 26% excellent. Corn dented 98%, 98% 1996, 94% avg. Winter rye 97% planted, 70% 1996, 90% avg.; 80% emerged, 55% 1996, 75% avg. Sunflower 99% bracts yellow, 98% 1996, 97% avg.; 77% mature, 78% 1996, 75% avg; 21% harvested, 11% 1996, 13% avg. Soybeans 87% mature, 74% 1996, 67% avg. Corn silage 94% harvested, 72% 1996, 67% avg. Sorghum silage 89% harvested, 52% 1996, 53% avg. Major activities: Harvesting row crops for grain, harvesting corn, sorghum for silage, finishing planting of winter wheat and rye, fall tilling.

TENNESSEE: Days suitable for fieldwork 6. Topsoil 19% short, 78% adequate, 3% surplus. Subsoil 2% very short, 21% short, 74% adequate, 3% surplus. Corn 95% mature, 100% 1996, 97% avg.; 73% grain harvested, 77% 1996, 67% avg.; 93% silage harvested, 98% 1996, 95% avg. Tobacco 86% burley harvested, 93% 1996, 94% avg.; 9% burley striped, 12% 1996, 10% avg.; 96% air-cured harvested, 97% 1996, 98% avg.; 84% fire-cured harvested, 94% 1996, 97% avg. Sorghum 95% mature, 94% 1996, 98% avg.; 51% grain harvested, 47% 1996, 69% avg. Winter wheat 10% seeded, 17% 1996, 15% avg. Pasture feed 3% very poor, 13% poor, 37% fair, 42% good, 5% excellent. Cattle 5% poor, 30% fair, 54% good, 11% excellent. It was a good week for agriculture crops as almost the whole period was open for harvest, seeding, tobacco work, cotton defoliation, or any other fall activity. Soil moisture was generally ample, helping growers prepare seedbeds, over-seed pastures, sow cover crop. Corn, sorghum harvest is on schedule, while tobacco lags about 10 days behind the five-year average. Cotton, soybeans remain in mostly good condition as these crops now begin to mature rapidly. Pastures are displaying slight improvement, due to recent sunshine, adequate moisture.

TEXAS: A return to hot, dry conditions occurred across the State last week, with only a slight cool down at night. Open conditions allowed harvesting operations to move ahead without delay. Dry conditions slowed small grain planting in many areas. Pastures and ranges in most areas continued to decline. Body condition of livestock has shown decline in some areas. Supplemental feeding operations increased over the past few weeks. Land preparations continued in many areas. Small Grains: Planted fields continued to emerge. However, pace has been slowed by dry conditions in many areas. These same dry conditions have also slowed planting. Rain is badly needed. Winter wheat was 67% normal, compared with 81% in 1996. Corn harvest resumed after brief delays 2 weeks ago in the plains and was making good progress. Harvest was winding down in many fields. Yields continued to be very good. Harvest has been completed in all other areas. In cotton crops, a return to hot weather last week helped boll opening in the plains and north-central areas. Harvest got underway in a few fields last week after much more defoliating activity occurred. Harvest was winding down in fields in the southern areas. Grain sorghum harvest increased in the plains and north-central areas with open conditions. Yields have been good. Harvest was completed in most other areas. Peanut harvest was beginning in more fields in the north-central areas. In south-central Texas, dryland fields have not developed very good, but irrigated fields showed good progress. Harvest continued in some fields with open conditions. Rice harvest was winding down in most fields as harvest resumed after heavy rains 2 weeks ago. Soybean harvest

increased in the High Plains, with average to above-average yields reported. Harvest of early varieties was winding down along the Upper Coast. Late varieties continued to dry down. Sugar beets: Hot weather may have adversely affected the sugar content in some fields. Harvest will get underway very soon.

Commercial Vegetables: In the Rio Grande Valley, planting activity continued without delays for the week. In the San Antonio-Winter Garden, good development occurred in melon fields. Land preparations continued. In the High Plains, pumpkin harvest continued. In the east, land preparations continued. In Trans-Pecos, chili harvest continued. Pecan shuck splitting increased in the south and central areas as harvest neared. Trees in many areas have lost leaves prematurely from a lack of moisture. Nut quality was still the big question as harvest neared in many areas. Scab appeared in many eastern groves.

Range and Livestock: Supplemental feeding operations increased in many areas during the past several weeks as pastures declined from lack of moisture. Some cattle have lost body condition. A good supply of hay was available in most areas. Stockers should soon be turned in on small grain fields.

UTAH: Days suitable for fieldwork 5.7. Topsoil 13% short, 84% adequate, 3% surplus. Subsoil 3% very short, 25% short, 70% adequate, 2% surplus. Winter wheat planted 79%, 73% 1996, 78% avg.; emerged 30%, 58% 1996, 49% avg. Corn dent stage 70%, 79% 1996; mature stage 30%, 63% 1996, 64% avg.; harvested for silage 66%, 77% 1996, 70% avg.; harvested for grain 5%, 15% 1996, 16% avg. Alfalfa hay 3rd cutting 86%, 94% 1996, 92% avg.; 4th cutting 43%, 49% 1996, 53% avg.; seed harvested 67%, 36% 1996, 67% avg. Potatoes 47% harvested, 52% 1996, 51% avg. Onions 62%, 77% 1996, 73% avg. Dry beans 80% harvested, 98% 1996. Apples picked 24%, 31% 1996, 50% avg. Cattle moved from summer range 47%, 62% 1996, 57% avg. Sheep moved from summer range 50%, 68% 1996, 60% avg. Major farm, ranch activities: Harvesting hay, harvesting vegetables, picking fruit, planting winter grains, moving cattle, sheep from summer ranges.

VIRGINIA: Days suitable for fieldwork 5.8. Topsoil 25% very short, 45% short, 30% adequate. Subsoil 25% very short, 52% short, 23% adequate. Corn 99% dent, 98% 1996, 99% avg.; 89% mature, 88% 1996, 96% avg.; 45% harvested, 34% 1996, 53% avg.; 85% corn silage harvested, 77% 1996, 83% avg. Soybeans 99% setting pods, 100% 1996, 100% avg.; 38% dropping leaves; 3% harvested, 3% 1996, 5% avg.; 16% very poor, 24% poor, 35% fair, 24% good, 1% excellent. Cotton 10% very poor, 13% poor, 26% fair, 45% good, 6% excellent. Fall apples 44% harvested, 58% 1996, 68% avg. Winter apples 14% harvested, 24% 1996, 22% avg. Flue tobacco 78% harvested, 87% 1996, 91% avg. Burley tobacco 95% harvested, 88% 1996, 95% avg. Dark fire cured tobacco 96% harvested, 99% 1996, 99% avg. Sun cured tobacco 100% harvested, 99% 1996, 100% avg. Peanuts 27% dug, 50% 1996, 42% avg.; 14% combined, 23% 1996, 23% avg.; 5% very poor, 21% poor, 35% fair, 35% good, 4% excellent. Barley 13% seeded, 18% 1996, 22% avg. Winter wheat 1% seeded, 3% 1996, 8% avg. Pasture feed 12% very poor, 32% poor, 45% fair, 11% good. Livestock 1% very poor, 6% poor, 28% fair, 63% good, 2% excellent. Cool temperatures during most of the week have helped maintain soil moisture supplies from previous rains. Scattered frost was reported in some low western areas. Moisture supply levels and crop conditions continue to deteriorate in the drier localities. Short pastures have some livestock producers concerned about hay supplies. Peanut harvest is slowly gaining momentum but is lagging behind last year and the five year average. Small grains are being planted as fast as land can be prepared. However, some producers are having difficulty preparing land for small grain seeding due to hard, dry conditions. Other activities include vegetable harvesting, cotton defoliation, livestock marketing. Producers continue to harvest, market tobacco.

WASHINGTON: Days suitable for fieldwork 4.8. Topsoil 6% short, 65% adequate, 29% surplus. Subsoil 13% short, 83% adequate, 4% surplus. Winter wheat 90% planted, 87% 1996, 78% avg.; 72%emerged, 67% 1996, 59% avg. Winter wheat seeding continued with northeastern counties reporting steady progress. Emerged wheat looked good to excellent statewide. Corn 100% good.; corn for grain 2% harvested, 3% 1996, 4% avg.; silage 65% harvested, 68% 1996, 67% avg. Potatoes 10% fair, 86% good, 4% excellent; 55% harvested, 66% 1996, 58% avg. Dry beans 100% good; 65% harvested, 77% 1996, 72% avg. Hay, other roughage supplies 5% short, 75% adequate, 20% surplus. Haying operations continued. Kittitas County reported delays due to rainy weather. Grant County was completing the 4th cutting of alfalfa hay. Range, pasture feed 2% very short, 18% poor, 38% fair, 41% good, 1% excellent. Pasture conditions continued to improve west of the Cascade mountains. Eastern areas pastures were holding very well. Whitman County reported some herds had moved to hay fields but pastures were holding very well for October. Pacific County reported cranberry harvest was nearly ready to begin. Thurston County Christmas readied fields for harvest. U-pick pumpkin businesses reported early sales. Rain stopped most field activity. Central areas, apple, grape harvests were in full swing. Benton County reported retarded maturation of the juice grape crop due to the large size of the crop. Yakima County reported rapid maturation of Braeburn, Granny Smith, Fuji apples. Vegetable seed harvest was nearing completion in Grant County.

WEST VIRGINIA: Days suitable for fieldwork 5.3. Topsoil 10% very short, 19% short, 65% adequate, 6% surplus. Corn 8% very poor, 17% poor, 21% fair, 53% good, 1% excellent; 91% dent stage, 95% 1996; 55% mature, 65% 1996, 89% avg.; 12% harvested grain, 8% 1996, 41% avg. Hay 3rd cutting 75%, 57% 1996, 79% avg. Soybeans 39% fair, 59% good, 2% excellent; 84% dropping leaves, 89% 1996, 80% avg.; 6% harvested grain. Tobacco 95% harvested, 95% 1996, 96% avg. Wheat planted 36%, 24% 1996, 16% avg. Apple 50% fair, 50% good; harvest is still progressing. Cattle 1% poor, 21% fair, 72% good, 6% excellent. Sheep 13% fair, 75% good, 12% excellent. Activities: Harvesting apples, corn, hay, winter wheat planting, marketing cattle, calves, calf weaning, vaccinating, fertilizer application.

WISCONSIN: Days suitable for fieldwork 6.5. Soil moisture 10% short, 85% adequate, 5% surplus. Only very scattered, minor cases of frost damage, except for Forest County. Soybean leaves were dropping fast; 99% of the acreage had shed leaves, 72% 1996, 66% avg. Soybean harvest 31% complete, 23 points ahead of 1996 and average. Soybean harvest hasn't been this good since 1991 when it was at 32% combined. Harvested beans in Green County recorded as low as 9% moisture, whereas Walworth County beans ranged 15-20% moisture levels. Dodge County reporter noted whole field yields in the 50s, while a Portage County reporter noted 45 bushels per acre. Soybeans 1% very poor, 1% poor, 8% fair, 59% good, 31% excellent. Timely-planted corn, statewide, was reported safe from frost. Corn silo filling was going fast with 54% of the acreage chopped, compared to 59% 1996, 5 points ahead of average. Some late hay harvesting was continuing on in the State with excellent drying conditions. Alfalfa seedings in St. Croix County looked very good. Farmers were finishing up planting winter wheat in Winnebago, Door, and Outagamie counties. Apple crop in Door County was reported lighter than average, but good quality with irrigated orchards. Potato harvest moving along well in Waushara County with good yields. Cranberry harvest was running about normal in Wood County. Fall tillage was at 10% complete, 11% 1996, 12% avg. Pasture feed 2% poor, 25% fair, 59% good, 14% excellent.

WYOMING: Days suitable for fieldwork 6.6. Topsoil 1% very short, 20% short, 77% adequate, 2% surplus. 1998 winter wheat 93% emerged, 89% 1997, 80% avg. Corn 97% mature, 95% 1996, 75% avg.; 5% harvested for grain, 19% 1996, 19% avg.; 96% harvested for silage, 95% 1996, 90% avg. Dry beans 97% combined, 96% 1996, 82% avg. Sugar beets 14% harvested, 15% 1996, 18% avg. Alfalfa 56% 3rd cutting complete, 89% 1996, 77% avg. Range, pasture feed 2% very poor, 2% poor, 11% fair, 69% good, 16% excellent. Livestock in mostly good condition. Livestock moved from summer ranges 49% cattle, calves; 54% sheep, lambs.

International Weather and Crop Summary

September 28 - October 4, 1997

HIGHLIGHTS

FSU-WESTERN: Cool, showery weather in Russia, Ukraine, the Baltics, and Belarus slowed summer crop harvesting but favored winter grain establishment.

FSU-NEW LANDS: Unseasonably warm and generally dry weather continued to favor spring grain maturation and harvesting.

EUROPE: Continued unseasonably warm, dry weather in the west, except in Spain, favored summer crop harvesting and winter grain planting.

AUSTRALIA: Rain is improving sorghum and cotton planting prospects in Queensland.

SOUTH ASIA: The monsoon continued its seasonal withdrawal, but scattered showers returned to the northwest, threatening cotton quality.

CANADA: Prairie harvests were nearly completed.

SOUTH AFRICA: Warm, mostly dry weather dominated the main agricultural areas.

SOUTHEAST ASIA: Heavy rain covered Indochina, but showers over Indonesia were only light and widely scattered.

EASTERN ASIA: Continued dryness favored seasonal fieldwork in the North China Plain.

SOUTH AMERICA: Much-needed rain benefited winter wheat in Argentina, while drenching rains in southern Brazil halted late-season wheat harvesting.

MEXICO: Dry weather returned to the north as tropical activity was concentrated in the southeast and along the Gulf Coast.

September 1997

MONTHLY DATA FROM SELECTED FOREIGN CITIES
CLIMATE PREDICTION CENTER-NCEP-NWS-NOAA
***** DATA NOT AVAILABLE*

COUNTRY	CITY	TEMPERATURE (C)						PRECIPITATION (MM)	
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	TOTAL	DPART F/NRM
NORWAY	OSLO	16	8	23	1	12	2.7	82	-16
SWEDEN	STOCKHOLM	17	9	24	1	13	1.2	56	3
FINLAND	HELSINKI	15	7	20	0	11	0.8	64	-9
UKINGDO	GLASGOW	17	8	20	0	12	-0.6	104	7
	EDINBURGH	17	8	21	1	13	0.3	32	-35
	BIRMINGHAM	18	10	22	4	14	0.7	22	-32
	LONDON	20	9	25	5	15	1.0	13	-55
IRELAND	DUBLIN	17	10	20	4	13	0.2	20	-46
ICELAND	REYKJAVIK	10	6	17	-2	8	0.9	100	33
DENMARK	COPENHAGEN	18	11	24	3	14	0.4	38	-25
LUXEMBO	LUXEMBOURG	21	10	27	4	16	1.8	56	-11
SWITZERL	ZURICH	20	11	27	6	16	1.7	42	-53
	GENEVA	22	12	29	6	17	2.4	44	-38
FRANCE	PARIS/ORLY	24	11	30	4	17	****	4	****
	STRASBOURG	23	9	30	3	16	1.1	43	-13
	BOURGES	24	11	28	6	17	1.3	29	-32
	BORDEAUX	27	13	31	8	20	2.7	33	-41
	TOULOUSE	26	14	30	8	20	2.0	9	-38
	MARSEILLE	27	17	31	14	22	2.1	18	-28
SPAIN	VALLADOLID	27	14	33	9	20	2.2	18	-16
	MADRID	30	15	35	11	22	2.2	48	15
	SEVILLE	32	20	38	16	26	0.9	52	30
PORTUGA	LISBON	29	18	34	15	24	2.4	3	-23
GERMANY	HAMBURG	18	10	29	2	14	0.5	37	-33
	BERLIN	20	11	28	5	15	0.7	18	-28
	DUSSELDORF	20	10	26	3	15	-0.2	54	-8
	LEIPZIG	20	10	28	3	15	1.1	21	-24
	DRESDEN	19	10	28	2	14	0.0	17	-31
	STUTTGART	22	8	29	3	15	0.7	25	-35
	NURNBERG	22	7	29	0	14	0.3	16	-36
AUSTRIA	VIENNA	22	9	29	1	16	0.0	20	-32
	INNSBRUCK	22	9	28	4	16	1.7	42	-37
CZECHRE	PRAGUE	19	8	27	1	14	0.2	30	-10
POLAND	WARSAW	18	9	25	3	13	0.0	37	-4
	LODZ	18	9	24	2	13	0.1	49	-5
	KATOWICE	19	8	26	1	13	0.6	48	-4
	PRZEMYSL	17	9	25	4	13	-0.6	78	23
HUNGARY	BUDAPEST	23	11	29	4	17	0.2	7	-34
YUGOSLA	BELGRADE	23	12	31	6	18	0.0	23	-27
ROMANIA	BUCHAREST	23	8	29	1	15	-2.3	18	-20
BULGARIA	SOFIA	21	9	30	4	15	-1.2	9	-35
ITALY	MILAN	26	16	32	10	22	3.3	1	-66
	VERONA	27	15	32	9	21	2.1	7	-55
	VENICE	25	15	30	10	20	0.8	4	-62
	GENOA	26	20	30	17	23	1.0	10	-105
	ROME	28	16	32	12	22	0.9	29	-42
	NAPLES	28	18	33	14	23	2.0	7	-77
GREECE	THESSALONIKA	26	15	33	11	20	-1.7	12	-14
	LARISSA	26	13	36	6	19	-2.6	1	-31
	ATHENS	27	19	31	15	23	-1.3	0	-12
TURKEY	ISTANBUL	22	15	27	10	19	-1.1	6	-35
	ANKARA	22	6	29	1	14	-4.1	0	-37
CYPRUS	LARNACA	30	19	34	15	24	-0.8	13	8
ESTONIA	TALLINN	16	8	23	0	12	0.9	81	-1
LITHUANI	KAUNAS	16	8	24	0	12	0.2	75	16
BELARUS	MINSK	16	7	23	2	11	-0.5	40	-16
RUSSIA	KAZAN	14	7	21	-1	11	-0.7	91	46
	MOSCOW	12	6	21	-3	9	-2.2	54	-7
	YEKATERINBURG	16	7	23	1	11	1.7	33	-17
	OMSK	18	8	28	-2	12	1.1	10	-22
	NOVOSIBIRSK	17	6	25	-3	11	1.3	10	-23
	BARNAUL	20	5	26	-3	13	1.5	6	-23
	KHABAROVSK	18	6	27	0	12	-1.1	42	-49
	VLADIVOSTOK	19	12	24	7	16	0.2	2	-128
	SARATOV	16	10	24	3	13	0.5	78	42
	VOLGOGRAD	18	8	26	1	13	-2.5	10	-12
	ASTRAKHAN	22	9	27	2	15	-2.0	16	-8
	KRASNODAR	20	9	27	3	15	-2.5	31	2
	ORENBURG	19	8	26	-1	14	-0.1	38	7
KAZAKHS	TSELINOGRAD	20	7	27	-1	14	1.7	10	-14

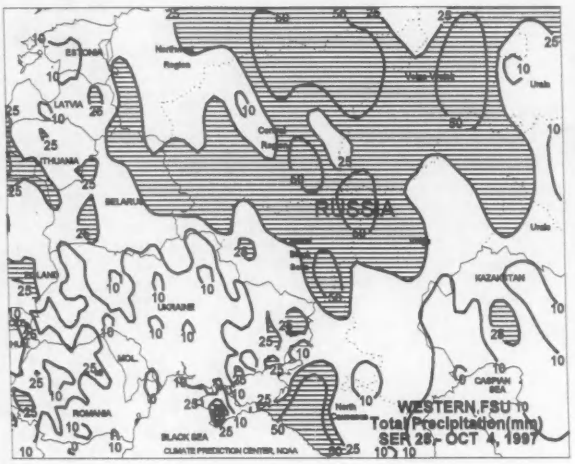
Based on Preliminary Reports

September 1997

COUNTRY	CITY	TEMPERATURE (C) AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	PRECIPITATION (MM) TOTAL	DPART F/NRM
	KARAGANDA	22	7	33	2	15	2.3	2	-20
GEORGIA	TBILISI	22	13	33	6	17	-2.1	48	10
UZBEKIST	TASHKENT	30	13	40	8	22	1.6	0	-5
TURKMENI	ASHKHABAD	30	17	41	11	23	0.3	0	-4
SYRIA	DAMASCUS	33	14	36	7	23	-0.2	0	0
ISRAEL	JERUSALEM	27	16	34	12	22	-0.2	7	7
PAKISTAN	KARACHI	32	27	37	24	30	0.7	6	-3
INDIA	AMRITSAR	34	23	37	18	29	0.2	3	-83
	NEW DELHI	34	25	37	18	29	0.2	85	-39
	AHMEDABAD	33	25	35	24	29	0.0	83	-29
	INDORE	31	21	34	19	26	0.4	53	-127
	CALCUTTA	33	26	35	24	29	0.2	239	-66
	VERAVAL	32	26	33	25	29	1.4	139	44
	BOMBAY	31	25	32	24	28	1.0	216	-93
	POONA	30	20	32	18	25	0.0	33	-100
	BEGAMPET	31	22	33	20	27	0.5	106	-65
	VISHAKHAPATNAM	31	26	34	23	28	***	276	**
	MADRAS	34	25	37	22	30	0.3	64	-76
	MANGALORE	31	24	32	23	27	1.3	107	-160
HONGKO	KINGS PEAK	29	24	32	19	26	***	230	**
N KOREA	PYONGYANG	23	11	29	3	17	-1.9	123	-28
S KOREA	SEOUL	25	16	32	10	21	0.4	102	-40
JAPAN	SAPPORO	21	14	28	8	17	0.2	134	-4
	NAGOYA	26	20	34	12	24	0.9	225	13
	TOKYO	26	21	33	15	23	0.2	211	31
	YOKOHAMA	26	20	32	15	23	0.4	190	-9
	KYOTO	28	20	35	12	24	1.2	217	11
	OSAKA	28	22	34	15	25	0.5	228	64
THAILAND	PHETCHABUN	32	24	34	22	28	0.4	274	-4
	BANGKOK	33	25	36	24	29	0.9	363	20
MALAYSIA	KUALA LUMPUR	32	25	34	23	28	2.0	252	60
VIETNAM	HANOI	29	25	34	17	27	-0.8	221	-33
CHINA	HARBIN	20	9	27	2	14	0.1	27	-30
	HAMI	28	9	37	5	19	-0.3	0	-4
	LANCHOW	23	11	34	5	17	1.5	27	-17
	BEIJING	24	13	30	8	19	-0.9	37	-12
	TIENTSIN	25	14	31	8	20	-1.4	46	6
	LHASA	19	8	26	3	13	-0.7	91	31
	KUNMING	21	13	25	6	17	-0.6	151	30
	CHENGCHOW	26	15	36	8	20	-0.6	64	-27
	YEHCHANG	28	19	36	15	24	0.4	34	-86
	HANKOW	27	19	34	15	23	-0.4	20	-69
	CHUNGKING	28	20	36	15	24	***	74	**
	CHIHKIANG	26	17	37	7	22	-1.3	124	58
	WU HU	27	18	34	12	22	***	62	**
	SHANGHAI	27	21	34	14	24	***	18	**
	NANCHANG	26	20	32	15	23	-0.9	32	-44
	TAIPEI	29	24	34	18	26	-0.2	223	2
	CANTON	29	23	35	16	26	-1.2	206	47
	NANNING	29	23	34	16	26	-1.0	75	-45
CANARY I	LAS PALMAS	26	22	29	20	25	0.9	9	3
MOROCC	CASABLANCA	26	20	29	15	23	1.4	4	-1
	MARRAKECH	31	20	40	14	26	0.3	85	79
ALGERIA	ALGER	30	19	39	14	25	1.6	37	8
	BATNA	27	14	35	10	21	0.2	56	35
TUNISIA	TUNIS	29	21	35	18	25	0.6	121	89
NIGER	NIAMEY	36	25	40	21	31	1.9	68	-21
MALI	TIMBUKTU	**	**	43	24	**	***	13	-11
	BAMAKO	31	23	34	20	27	0.4	91	-102
MAURITAN	NOUAKCHOTT	35	22	42	-26	29	-0.7	19	-7
SENEGAL	DAKAR	31	26	36	21	28	0.9	95	-42
CHAGOS	DIEGO GARCIA	**	26	31	23	**	***	153	-85
LIBYA	TRIPOLI	32	21	40	11	26	-0.3	46	31
	BENGHAZI	29	21	34	16	25	-0.3	0	-3
EGYPT	CAIRO	32	21	36	18	26	-0.3	0	0
	ASWAN	39	24	42	22	32	0.7	0	0
ETHIOPIA	ADDIS ABABA	23	11	25	9	17	0.9	90	-85
KENYA	NAIROBI	27	13	31	9	20	1.6	0	-25
TANZANIA	DAR ES SALAAM	30	19	32	17	25	0.4	2	-27
GABON	LIBREVILLE	**	**	29	21	**	***	**	**
TOGO	LOME	30	24	32	15	27	1.3	37	-11
BURKINA	OUAGADOUGOU	34	24	37	18	29	1.8	49	-90
COTE D'I	ABIDJAN	29	23	30	22	26	1.3	7	-59
MOZAMBI	MAPUTO	26	19	34	15	22	1.6	27	-16
ZAMBIA	LUSAKA	**	**	33	13	**	***	**	**

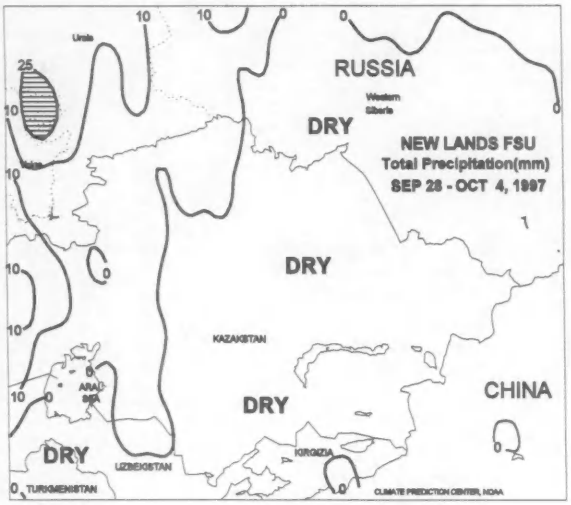
COUNTRY	CITY	TEMPERATURE (C) AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	PRECIPITATION (MM) TOTAL	DPART F/NRM
ZIMBABW	HARARE	**	**	32	11	**	***	24	16
S AFRICA	PRETORIA	25	13	36	0	19	0.3	28	6
	JOHANNESBURG	21	10	31	4	16	-0.4	29	2
	BETHAL	22	9	32	2	15	0.5	37	13
	DURBAN	23	16	30	13	19	0.3	71	-2
	CAPE TOWN	21	10	34	5	15	1.7	7	-33
CANADA	TORONTO	21	10	27	2	16	0.3	43	-32
	MONTREAL	19	10	25	1	15	0.2	68	-19
	WINNIPEG	21	7	30	-2	14	1.9	12	-40
	REGINA	23	6	31	-3	14	2.5	24	-10
	SASKATOON	21	6	32	-2	14	2.5	14	-18
	LETHBRIDGE	24	6	33	-5	15	2.8	17	-27
	CALGARY	21	5	29	-2	13	2.5	34	-13
	EDMONTON	19	8	29	0	13	2.1	64	22
	VANCOUVER	20	12	26	7	16	1.6	98	34
MEXICO	GUADALAJARA	**	**	27	15	**	***	**	**
	MEXICO CITY	24	14	26	12	19	2.4	98	-20
	ACAPULCO	**	**	33	23	**	***	103	-272
BERMUDA	ST. GEORGES	28	24	29	22	26	-0.5	221	58
BAHAMAS	NASSAU	31	25	34	21	28	0.7	194	27
JAMAICA	KINGSTON	33	27	34	24	30	1.3	108	-8
P RICO	SAN JUAN	32	25	34	22	29	0.5	84	-39
GUADELO	RAIZET	32	25	34	24	29	1.5	113	-35
MARTINIQ	LAMENTIN	31	25	34	23	28	1.6	179	-36
BARBADO	BRIDGETOWN	31	25	31	23	28	0.3	158	22
TRINIDAD	PORT OF SPAIN	33	24	35	22	28	1.8	134	-69
COLOMBI	BOGOTA	20	7	23	0	13	0.3	34	-24
VENEZUE	CARACAS	32	25	34	24	29	1.1	44	-2
F GUIANA	CAYENNE	33	22	34	20	27	1.0	5	-71
BRAZIL	FORTALEZA	31	23	33	22	27	0.3	1	-25
	RECIFE	29	22	30	20	25	0.3	20	-92
	BELO HORIZONTE	30	19	35	16	24	3.0	59	19
	CAMPO GRANDE	33	21	36	16	27	4.4	48	-39
	FRANCA	29	19	34	17	24	5.4	47	-25
	RIO DE JANEIRO	**	**	27	19	**	***	**	**
	LONDRINA	28	17	36	13	22	2.8	46	-54
	SANTA MARIA	22	13	34	4	17	1.2	58	-96
	PORTO ALEGRE	22	13	28	4	18	0.8	185	61
PERU	LIMA	24	19	26	18	22	5.1	0	0
BOLIVIA	LA PAZ	15	0	20	-4	8	-0.6	63	32
CHILE	SANTIAGO	18	8	29	2	13	1.8	79	59
ARGENTIN	IGUAZU	27	16	35	8	21	***	185	**
	FORMOSA	28	18	37	10	23	3.3	72	-21
	CERES	25	11	34	5	18	1.7	33	-14
	CORDOBA	23	9	32	3	16	1.2	18	-21
	RIO CUARTO	20	9	28	3	15	1.3	38	-4
	ROSARIO	21	10	29	2	15	1.5	20	-43
	BUENOS AIRES	18	7	24	-1	13	-0.1	37	-22
	SANTA ROSA	19	7	27	-2	13	0.6	7	-32
	TRES ARROYOS	15	5	22	-2	10	-1.2	60	6
NEW CAL	NOUMEA	25	18	29	16	21	0.6	10	-30
FIJI	NAUSORI	25	20	29	16	22	-0.5	139	-25
SAMOA	PAGO PAGO	**	**	32	9	**	***	**	**
TAHITI	PAPEETE	29	22	31	19	26	0.7	13	-33
AUSTRALI	DARWIN	32	23	35	21	27	-0.6	18	0
	BRISBANE	23	13	29	7	18	-0.4	39	6
	PERTH	19	10	23	5	14	-0.1	102	31
	CEDUNA	19	9	30	4	14	-0.5	60	32
	ADELAIDE	17	9	22	5	13	-0.4	75	18
	MELBOURNE	15	6	19	1	11	-1.5	65	17
	WAGGA	17	6	19	3	11	0.2	66	16
	CANBERRA	15	5	19	0	10	0.3	74	18
PHILIPPI	MANILA	**	**	34	23	**	***	134	-209

Based on Preliminary Reports



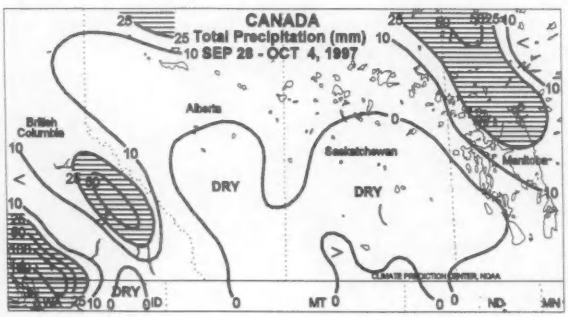
FSU-WESTERN

In Russia, frequent showers (17-50 mm, with local amounts in excess of 50 mm) fell over most areas, providing abundant topsoil moisture for winter grain emergence and establishment. However, the precipitation hampered corn, sunflower, and sugar beet harvesting, which typically extends through October. In Ukraine, cold, damp weather prevailed over most of the country, slowing summer crop harvesting and winter wheat planting, but providing topsoil moisture needed for winter wheat emergence and establishment. Greatest amounts of rain (10-34 mm) fell in the western and eastern Ukraine, with lesser amounts of precipitation (less than 10 mm) occurring in central Ukraine. Elsewhere, light to moderate showers (10-38 mm) occurred in Belarus and the Baltics, interrupting summer crop harvesting but providing favorable moisture for winter grain establishment. Weekly temperatures averaged 2 to 4 degrees C below normal in Ukraine, the Baltics, and Belarus, and 1 to 3 degrees C below normal in Russia.



NEW LANDS

In Russia, continued unseasonably warm, dry weather provided nearly ideal weather conditions for spring grain maturation and harvesting. Although light scattered showers (around 10 mm) fell over the northern Urals during the week, the precipitation caused only brief delays in harvesting. Reports as of October 1, 1997 for all of Russia indicated that small grains and pulses, excluding corn, were 86 percent harvested. In Kazakstan, the eighth consecutive week of dryness was accompanied by unseasonably warm weather, allowing spring grain harvesting to progress rapidly toward completion. Weekly temperatures averaged 2 to 7 degrees C above normal in Russia and 3 to 9 degrees C above normal in Kazakstan. In cotton-growing areas of Central Asia, unseasonably hot, dry weather favored cotton in the open boll stage of development and harvesting. Weekly temperatures averaged 5 to 9 degrees C above normal over the region.



CANADA

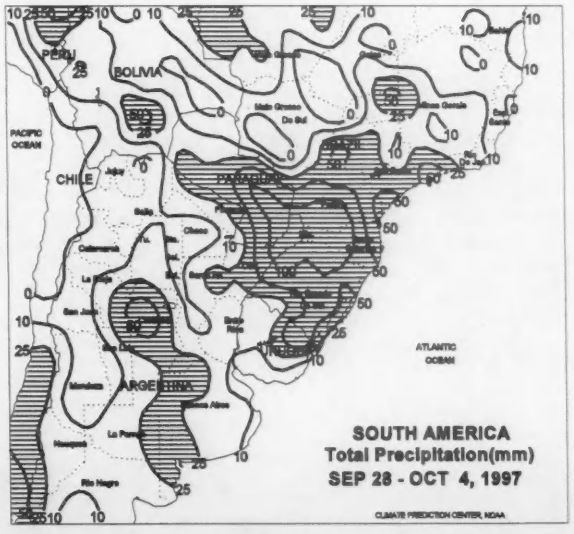
Dry weather, accompanied by a second week of much-above-normal temperatures, allowed Prairie summer grain and oilseed harvests to near completion. The greatest remaining activity was reportedly in the northwest, which has struggled all season with wetness and development delays. In Ontario and Quebec, moderate to heavy rainfall (10-25 mm or more) increased topsoil moisture for winter wheat planting but soaked unharvested corn and generally slowed summer crop maturation. Some frost was likely as minimum temperatures dipped into the low single digits, raising concern for crops behind in normal development This is the final summary of the growing season. Coverage will resume next spring with the commencement of spring planting.

EUROPE

Dry weather continued over the United Kingdom, France, the Benelux countries, northern Spain, and Italy, allowing corn, sunflower, sorghum, and soybean harvesting to progress without delays. Although continued unseasonably warm, dry weather in France has been favorable for summer crop maturation and harvesting, it has raised concerns about adequate topsoil moisture needed for winter wheat planting. In Germany, light, scattered showers (less than 10 mm) caused only brief delays in summer crop harvesting and moistened topsoils for early winter wheat planting. Early-season rains (10-25 mm) continued in southern Spain, with locally heavy rain (more than 100 mm) falling in southeastern areas. Weekly temperatures averaged 1 to 3 degrees C above normal in western Europe. In eastern Europe, widespread light showers (10-25 mm) spread from Poland southward through the Czech Republic and Slovakia into northern Romania and former Yugoslavia, slowing summer crop harvesting but favoring emerging winter grains. Light, scattered showers (less than 10 mm) in southern Romania and Bulgaria caused only brief delays in summer crop harvesting and winter grain planting. Weekly temperatures averaged 2 to 5 degrees C below normal in eastern Europe.

MEXICO

Drier weather returned to the north as tropical activity shifted toward the east. Significant moisture was confined to the southern and Gulf Coasts, with rainfall totaling 25 to 50 mm or more over a broad section of the southeast. Although some delays in summer grain harvesting occurred in these areas, the bulk of the corn and sorghum areas were favorably dry. However, across northern Mexico, more rain would be welcomed for winter wheat planting, which usually commences in October.

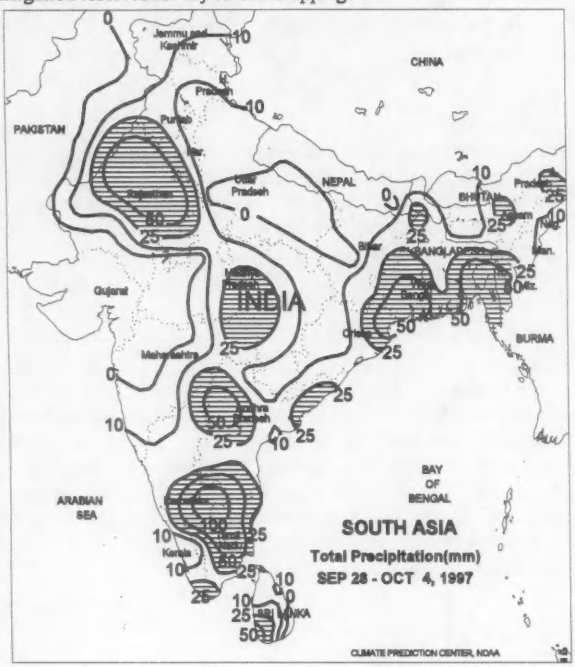


SOUTH AMERICA

In Argentina, much-needed rain (10-25 mm, with local amounts in excess of 40 mm) fell over Buenos Aires, western La Pampa, Cordoba, Santa Fe, and Entre Rios, benefiting winter wheat and increasing topsoil moisture for early corn and sunflower planting. Soybean planting typically begins in early November. Weekly temperatures in Argentina averaged 1 to 2 degrees C above normal. In southern Brazil, drenching rains (50-100 mm or more) occurred in Rio Grande Do Sul, Santa Catarina, and Parana. The rain likely caused some flooding and halted winter wheat harvesting and corn planting. Farther north in Sao Paulo and Minas Gerais, light to moderate rain continued to spur flowering in coffee areas. Weekly temperatures averaged 1 to 4 degrees C above normal in southern Brazil.

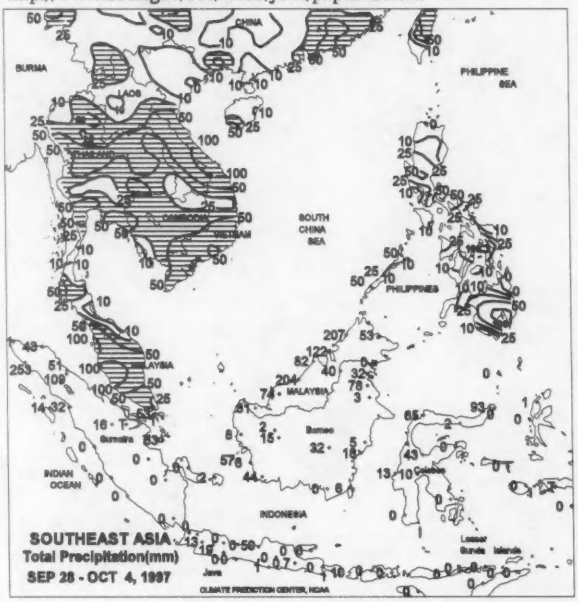
SOUTH ASIA

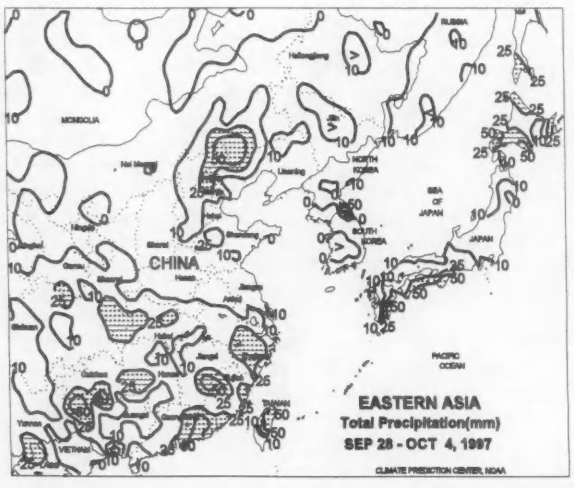
The monsoon continued its seasonal withdrawal, but a mid-latitude storm system brought scattered showers (10-25 mm or more) to India's northern cotton belt that threatened the quality of maturing crops. Winter grain and oilseed planting typically begins in October across Pakistan and northern India, relying on residual monsoon moisture for germination and vegetative development. The continuation of seasonal rains (10-50 mm or more) in the south and east benefited immature grains, oilseeds, and cotton. Rainfall along the southeast coast and in the heart of the eastern rice region increased irrigation reserves for dry season cropping.



SOUTHEAST ASIA

Unseasonably heavy rain (25-50 mm or more, locally exceeding 100 mm) covered much of Indochina, largely due to late-season tropical storm activity. Remnants of Tropical Storm Hank brought more excessive rain to Vietnam's central coast, disrupting rice harvesting and likely generating additional flooding and crop damage. In Thailand, the widespread rainfall added to the growing moisture reserves that will be available for second-season rice. Widespread shower activity continued over the Philippines, with amounts of 10 to 50 mm or more in most grain and sugarcane areas. Farther south, beneficial rain (25-50 mm or more) covered most Malaysian crop areas, but drought continued over Indonesia. Indonesia's main-season rice, typically planted from October through January, will face delays and moisture shortages unless the rainy season begins soon. The latest information on El Niño, a likely cause for the current poor growing prospects, can be found at http://www.usda.gov/oce/waob/jawf/poplinks.htm.





EASTERN ASIA

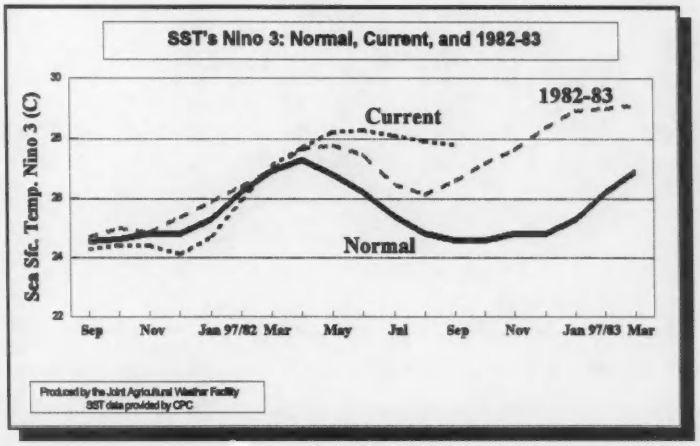
Summer crop harvesting and winter wheat planting continued in the North China Plain, although rain (10 mm or more) caused some fieldwork delays from central Shandong northward. The moisture was welcomed for winter wheat establishment. Showers (10-25mm or more) also benefited the far western winter wheat areas (Sichuan and Shaanxi) as moisture from southern China pushed north of the Yangtze River. Unfortunately, below-normal temperatures accompanied the rain across southern China, continuing a trend of somewhat diminishing growth rates for late double-crop rice. Farther north, temperatures averaged above normal from the North China Plain into Manchuria, including much of the Korean Peninsula. Pockets of moderate rain (10mm or more) hampered summer crop harvesting in Manchuria, but favorably drier weather brought some needed relief to Japan and the Koreas.

(Continued on back cover)

Two Major El Niños Compared: 1982 vs 1997

The 1982-83 El Niño was the strongest of the century, spreading drought, floods, and extreme weather across vast stretches of the globe. Total combined losses to property and agriculture from related weather catastrophes are estimated to have exceeded $10 billion. Floods and famine caused thousands of deaths. The current El Niño is now comparable to the 1982-83 event in magnitude, and is expected to have major impacts on world weather through next winter. The following is a summary of comparisons based on the atmospheric and oceanic indicators as well as the weather impacts already experienced.

Sea surface temperatures (SST) in the eastern equatorial Pacific are the highest observed at this time of year since at least 1950. The SST anomaly in the key Niño 3 region (90-150°W, 5°N-5°S) has exceeded +3°C during the past 2 months. No other El Niño in the past 50 years has even approached the magnitude of these anomalies for this time of year, including the 1982 event (see accompanying graph). However, the current El Niño is still slightly less intense than the 1982 episode based on the peak anomalies reached during the entire 1982-83 episode. During January 1983, for instance, SST anomalies peaked at +3.6°C in the Niño 3 region, slightly higher than the September 1997 anomaly (+3.2°C). Comparison with other indicators of El Niño strength, including winds and pressures, paint a similar picture: the current event is approaching the record 1982 event in magnitude.



Global impacts from each El Niño episode (approximately 12 since 1950) differ slightly, as the spatial and temporal evolution of each episode varies. Atmospheric and oceanic conditions outside the tropical Pacific also play a role. However, a number of impacts tend to consistently occur, and several have already emulated 1982. In both 1982 and 1997, drought afflicted Indonesia, with forest fires casting a pall of smoke and haze across Indonesia and Malaysia, especially during August and September. Summer drought also affected Mexico and Central America both years, and the tropical cyclone season in the western Atlantic and Caribbean was quiet in 1982, with only five named storms, the exact number tallied so far this year. However, there were some notable differences between both events, including the Western Pacific storm season. The Philippines endured 21 tropical cyclones in 1982, a stark contrast with 1997, in which not a single tropical storm has struck the archipelago through early October. Australia in 1982 experienced one of the worst droughts ever, with the wheat crop reduced by 50 percent from the previous year. This year, drought was much more limited, and timely rains in August and September in the east boosted wheat prospects. In India, the southwest monsoon was poor in 1982, while rainfall was normal in 1997.

It remains to be seen if the 1997-98 El Niño duplicates the severe December to April drought in southern Africa and the floods in Peru, Ecuador, Brazil, and Argentina. Farmers and property owners along the U.S. West Coast and Gulf of Mexico will also be hoping that the winter and spring storms and floods of 1982-83 skip an encore performance.

--Douglas Le Comte

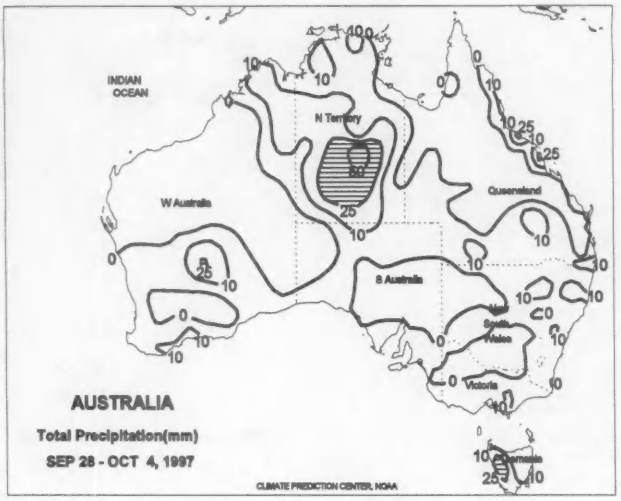
The *Weekly Weather and Crop Bulletin* is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the *Weekly Weather Chronicle*. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53rd Congress, 3rd Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

Annual subscriptions: domestic first class **$45**, foreign **$55** (in U.S. funds by international money order or check drawn on U.S. bank) payable to **U.S. Department of Commerce, NOAA**. POSTMASTER: Send address changes to: **Climate Prediction Center, W/NP52, Attn: *Weekly Weather and Crop Bulletin*, NOAA/NWS/NCEP, 4700 Silver Hill Road, Stop 9910, Washington, DC 20233-9910.** Order subscriptions from the office and address listed above. First-class postage paid at Washington, DC, and other mailing offices. Correspondence to the meteorologists should be directed to: **Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, DC 20250.** Internet URL: http://www.usda.gov/oce/waob/jawf; E-mail address: ***wwcb@jawfsrv.wwb.noaa.gov***

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service/Climate Prediction Center
Managing Editor ..... ***Douglas Le Comte*** (202) 720-7919
fax (202) 720-1455
Editor ..... ***Brad Rippey*** (202) 720-1444
Meteorologists .... ***David Secora, Jeff Savadel, Brian Morris***
Special Requests ..... (202) 720-7917
Subscriptions ..... ***John Kopman*** (301) 763-8227, ext. 7534
fax (301) 763-8395

U.S. DEPARTMENT OF AGRICULTURE
Economic Research Service
E.R.S. Editor ..... ***Sharon Lee***
National Agricultural Statistics Service
Agricultural Statistician ..... ***Rhonda Brandt*** (202) 720-7621
State Summaries Editor ..... ***Kiara Haskins*** (202) 720-8033
World Agricultural Outlook Board
Agricultural Weather Analysts ..... ***Ray Motha***
..... ***Tom Puterbaugh, Mark Brusberg, Bob Stefanski***
Secretary ..... ***Teresa Davis*** (202) 720-9807

(Continued from page 26)



AUSTRALIA

Dryness accompanied seasonably mild temperatures throughout the southeast. The gradual decline in rainfall over the past few weeks has left most crops in need of moisture for their final stages of development. Elsewhere in the east, scattered showers (5-30 mm) fell from central New South Wales northward, aiding sorghum and cotton germination but hampering winter grain drydown. Temperatures were 1 to 2 degrees C above normal in southern Queensland, with highs in the lower 30's, accelerating winter grain maturity. On the 6th, scattered, locally heavy showers were breaking out over Queensland's western summer crop areas, promising to provide needed moisture. More information on eastern Australia's recent increase in rainfall will be provided in next week's summary. In Western Australia, mostly dry, mild weather favored crop development. In New Zealand, light to moderate showers (10-25 mm or more) covered the main agricultural areas.

Climate Prediction Center, W/NP52
Attn: *Weekly Weather & Crop Bulletin*
NOAA/NWS/NCEP
4700 Silver Hill Road
Stop 9910
Washington, DC 20233-9910

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

WEEKLY NEWS BULLETIN
FIRST CLASS

WWCB 1

UMI
Periodicals check In
300 N. Zeeb Rd.
P.O. Box 1346
Ann Arbor MI 48106-1346

FIRST CLASS MAIL
POSTAGE & FEES PAID
NOAA
PERMIT NO. G-19